

Employment, skills and tripartite relations

The evolution of skill development systems in Japan and Singapore

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Abstract

The study addresses the historical processes by which interactions between the state, business and labour influence the evolution of skill development systems. Such systems consists not only of education and training providers, but also of employment practices, the wage structure and the articulation of qualifications in the labour market, which form the broad incentive mechanism for individuals and firms to train. Individuals and firms responding to formal, and informal, rules and incentives create a generalised pattern of training behaviour, which provides the distinctive character of each skills system.

The study argues that relations and interactions between the state, business and labour have a major influence on shaping the rules and incentives, which are referred to here as *institutions*. The study demonstrates that a skills development system is an historical product, reflecting the evolution of power relations, contested interests and economic and social changes. While the system is often influenced by changing skill demands stemming from economic, political and technological challenges, it is also shaped by how the stakeholders respond to these challenges by creating or changing the institutions that make up the system.

An analysis of the evolution of the skill development systems in Japan and Singapore demonstrates the influence of these types of historical processes. While the dominant theoretical perspective used in analysing skill systems in East Asia emphasises the instrumental role of the state, the analysis of Japan and Singapore highlighted considerable differences in the state's role. The study acknowledges the usefulness of the developmental state perspective, but finds that viewing the skills system through the lens of tripartite interactions revealed the influence played by non-state forces –in particular in the case of Japan but to some extent also in Singapore– which have not been sufficiently accounted for previously. The skill development system in each country reflects unique accumulation of historical conflicts, compromises and agreements between the stakeholders. Therefore, this explains the different systems in Japan and Singapore.

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Declaration of number of words

I hereby declare that, except where explicit attribution is made, the work presented in this thesis is entirely my own.

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Chapter 1 Introduction

This study addresses the historical processes by which the interactions between the state, business and labour influence the evolution of skill development systems. A skill development system consists not only of education and training organisations, but also the general pattern of employment practices, the wage structure, characteristics of the labour market and coordination mechanisms between the education sector and labour market needs. The set of these general patterns creates a broader incentive mechanism for individuals and firms to train. The interactions and agreements between the tripartite actors have a major influence on shaping the general pattern of practices.

A starting point for the inquiry is the evolution of different skill development systems across countries. Many countries have attempted to create, or maintain, a system that is characterized by a high level of educational attainment and the continuous upgrading of skills and knowledge among the workforce, which supports high-skills-based production and service provision in the economy. However, the way in which the national skill development system is organized and functions in achieving such objectives is based on its distinctive national characteristics. Even among those countries which have successfully pursued a 'high-skills route', they have done so in different ways.¹ I have sought to find out how the distinctive national characteristics of a skill development system evolve and what influences the course of its evolution.

The study draws on the specific cases of skill development systems in Japan and Singapore. My interest in studying these cases grew out of the insight that they exhibit successful but different approaches to achieving a high-skills economy. My choice of cases was also prompted by the considerable attention to East Asian economic growth and the proactive role of the state in leading that process in contrast

¹ For a detailed discussion of high-skill routes, see: Ashton and Green (1996) and Brown, Green and Lauder (2001).

to Anglo-American type economies. Such a role for the state is emphasised in the area of education and training in East Asia. Notwithstanding the unique role of the state in the region, however, I felt a certain uneasiness about generalisations of East Asia as a whole and that too much emphasis has been placed perhaps on the role of the state. I felt that it was as important to demonstrate the diversity in the skill development systems in the region and to re-visit the dominant role of the state in creating such systems.

Given the important role played by education and training in supporting the regions' unprecedented economic success and its social transformation, the commonality among the countries (ie. high investment in education and the proactive role of the state in promoting education) has tended to be stressed, albeit with important differences. Despite the fact that both Japan and Singapore are regarded as having (or having had) a developmental state in which education and training played prime roles in leading the process of a rapid industrialisation, the two countries have come to develop different skill development systems.

The Japanese system is centred on the company and in most cases these (in particular large) companies prefer to train their workers themselves.² In general, workers increase their skill levels by accumulating experiences within specific companies as they advance up the internal career ladder (i.e. the internally-oriented labour market). What workers learn is closely related to and integrated into their work. While the importance of off-the-job training is increasing, informal and non-structured on-the-job training is still the predominant form of learning at work.³ The thesis argues that this system can be explained by the particular nature of historical events and the outcomes of tripartite relations following the Second World War. The government emerged relatively weak, while unions and, later, employers were much stronger in shaping the employment system, albeit the influence of unions decreased over time. Bitter labour disputes in the 1940s-50s subsequently contributed to more collaborative

² The system has been challenged in particular since a decade-long economic recession in the 1990s. The general picture of the system is still valid, however, as the present study discusses in a later chapter.

³ Although the present study focuses on this system which centres on large companies, it is important to note that education and training in small companies rely more on formal training institutes (i.e. vocational high schools, specialised trade schools). Here the system in Japan is closer to that of Singapore.

industrial relations, as both workers and employers realised that conflict was costly and counterproductive. In this process, the power of militant labour factions declined and moderate forces within the labour movement became more influential. Labour's demands over job security, combined with the desire of employers to retain workers during the labour shortages of the 1950s and 1960s, resulted in the diffusion of long-term employment practices that facilitated enterprise-based training. In that context, seniority continued to constitute a part of wage determination, and that, in turn, supported long-term employment practices. Labour unions in the educational sector fought for the egalitarian unified system –while keeping the system autonomous from immediate economic interests– that contributed much to the rapid levelling up of education attainment among the population.

In contrast, the system in Singapore emphasizes pre-employment formal education and training which are strongly guided by the state. The thesis argues that the system also developed out of the country's peculiar historical events and tripartite relations. However, the outcome of the power struggle following the formative historical events was different from Japan in that the immediate pre- and post-independence period (first half of the 1960s) witnessed the rise of the state as a dominant force which conditioned subsequent tripartite relations. The government vigorously promoted the creation of a pro-business climate (including a skilled workforce) that was necessary for national survival. This included the suppression of anti-government social forces such as traditional (militant) labour.

In Singapore, relatively high labour turnover in the country had been a bottleneck for companies to invest in training for a long time. The fluidity of labour was reinforced by a flexible and largely merit/performance-based wage structure (in the mid-1980s), which has contributed to the formation of an externally-oriented labour market. The close link between wages and occupation has evolved since and has increased the importance of pre-employment formal education and training. In general, career progression and skill development take place along occupational lines largely in the external labour market. In contrast to Japan, the formal education system is closely linked to the needs of the economy and such responsiveness further increases the importance of the formal system in the overall skill development system. The state has

intervened considerably to ensure the link. Government-related agencies have also been active in providing training for the workforce. Since the 1990s, however, the level of training investment by enterprises has begun to rise, indicating an increased role for company-based training.

Thus, the overall **thesis statement** can be presented as follows. The differences between Japan's internally-oriented and Singapore's externally-oriented skills development systems reflect differences in tripartite power relations and social dialogue over employment issues, conditioned by peculiar historical events in the two countries. The peculiar historical events and trends shaped the power relations among the tripartite actors and, in turn, the outcome of social dialogue among them influenced the institutions that comprise the skills development system. In Japan, employers and unions played a stronger role in shaping the system while in Singapore the state proved to be a more powerful actor.

1.1 Relation to existing studies and theoretical framework

This inquiry went through several stages of theoretical exploration. An interest in different systems first led me to explore the main existing theoretical paradigms used to understand what influences the behaviour of individuals and firms to train. One such paradigm indicates that such behaviour is the product of individual agency, while another paradigm indicates that it is the product of structure. For this, I examined human capital theory which is based on the former paradigm, and the cultural perspective which is an example of the latter paradigm. The weaknesses of these accounts guided me to explore another approach which can account for both individual agency and the structural or contextual environment. For instance, human capital theory focuses too much on utility-maximising rational behaviour while failing to recognise that such rationality is relative depending on given contexts. The cultural perspective, on the other hand, tends to emphasise too much the collective nature of individual behaviour (e.g. national cultural traits) with limited space for individual agency and differences in human or firm behaviour. I was then intrigued by the institutional approach, which suggests that differences in such systems are closely

related to differences in institutional arrangements and structures. The notion that 'the behaviour of individuals (and firms) is essentially based on their rational choices, although institutions which surround them create rules and incentives that establish the conditions for bounded rationality' was convincing in understanding how individuals and firms train. The different skill development systems evolve because they consist of different rules and incentives to train, which are referred to as *institutions* in this study.

This understanding prompted me to pose a larger question, however, as to how different institutional structures have come to exist in the first place. The review of institutionalism in fact revealed that the theoretical conception of institution formation and in particular change is a relatively unexplored issue in the context of East Asia. This encouraged me to explore further and to focus the study on the evolution of institutions and the broader skill development system by undertaking an historical analysis of the skill development systems of Japan and Singapore.

While existing studies often acknowledge social and historical factors which affect the rise of institutions, the comparison of contemporary skill formation systems either has not focused on, or sufficiently dealt with, the historical *evolution* of institutions. The notion that actors' bounded rationality influences the formation of institutions directed me to explore and search out the major interest groups influencing skill development. The notion of "historical compromises between various ideas" in post-war industrial relations in Germany, hinted at by Streeck (1997a), prompted me to look into influential interest groups: namely the state, business and labour⁴. This helped me later to conceptualise a framework in which the evolution of institutions and thus the skill development system reflected the interests and interactions between these tripartite actors under specific power relations and historical circumstances.

While the relations between the state, business and labour have been a subject of debate for a long time, the dominant theoretical perspective used in analysing skill development systems in East Asia emphasises the proactive role of the state. This perspective, the *developmental state approach*, has been developed since the early 1980s and has been applied to the development of skill systems in the region since the

⁴ 'Labour' is used to refer mostly to organised labour, such as labour unions, but it also includes unorganised labour where specifically indicated. In the area of education, the study includes parents as stakeholders.

mid-1990s. As an approach which appreciates the autonomous and instrumental nature of the state, it added a new perspective to the traditional Marxist approach to understanding the state and capitalist relations. However, the strength of the developmental state approach is also its weakness. The approach is useful in providing a general characterisation of East Asia's economic growth, and in contrasting it with a more market-oriented approach to growth, because it highlights the unique role of the state. This general characterisation is, however, less helpful in understanding intra-regional differences in terms of the dynamics of tripartite relations. The emphasis on the state has tended to underplay the influence of other societal forces. In this regard, I believe that taking sufficient account of these societal forces can strengthen our understanding of the development of different systems within the region. *Thus, the study has come to adopt an institutional approach based on tripartite power relations in analysing the evolutions of the skill development systems in the two countries.*

1.2 Contribution of the thesis to the study of skill formation

The study, therefore, contributes to our understanding of the formation of skill development systems in East Asia in three ways. Firstly, it moves the debate from 'what types of institutions account for different systems (notably 'high skills systems')' to 'how have such institutions evolved'. This question is relatively unexplored, and when it has been addressed, the emphasis has tended to be on the historical conditions which led to the *rise* of such institutions, with limited focus on the process of *evolution* and *change* over time (Ashton and Green, 1996; Green, 1999; Brown, Green and Lauder, 2001). The present study attempts to address the question by examining Japan from 1945 to the present and Singapore from 1965 to the present. Existing studies do acknowledge that the institutions that make up the skill development system do change over time. I felt, however, that only with a detailed historical analysis examining evolution and change could a full account be provided of the factors influencing the formation of institutions and the broader skill development system.

Secondly, the study addresses three elements which have not been fully addressed in existing studies of skill development systems in East Asia, namely: intra-regional contrast, non-state actors and the interaction between those actors.

The study is an intra-regional comparison which highlights the differences between developmental state approaches to skill formation. Existing studies have tended to include Japan and Singapore as exemplars of the East Asia model (Green, 1999; Brown, Green and Lauder, 2001) while *intra*-regional studies comparing (and contrasting) different developmental states are few. A comparative study of East Asian skill formation by Ashton *et al.*, (1999) is a rare exception, although the work did not include Japan.

Probably the study's most important contribution is its emphasis on how conflict, compromise and agreement among the actors, pursuing their different interests, has shaped skill development systems. The importance of domestic conflict has been acknowledged in other studies, notably Ashton and Green (1996), but the emphasis has been on the role of the state in mediating such conflict; thus the account of the role of other actors is limited. By fully accounting for these other actors, the present study deepens the current understanding of skill development systems in the region.

Thirdly, in the process of conducting the study, a new five-part framework was developed and helped to guide the overall analysis of the two cases. The framework sets out the various factors that can influence the shaping of a skill development system, while at the same time, it indicates that the impact of such factors are mediated through the specific political economy of each national situation. Thus, the framework allows us to investigate the historical evolution of skill development systems through the lens of internal stakeholders and their power relations. (The framework is not applied mechanistically in each chapter, however, but instead provides an overarching guide for the empirical investigations.) This approach has not been fully utilized previously in the study of skill formation in East Asia. In this respect, this framework, outlined below, can also be used for the comparative analysis of skill formation systems of other countries.

1.3 Five-part analytical framework

The basic premise of the study is that a skill development system consists of a complex set of institutions which guides the choices and actions of individuals and firms to train. These institutions include not only education and training providers. They include employment practices, the wage structure and the articulation of qualifications in the labour market, which form a broader incentive mechanism for individuals and firms to train. Individuals and firms responding to these formal, or informal, rules and incentives create a generalised pattern of training behaviour, which provides the distinctive character of each skill development system.

The study argues that the relations and interactions between the state, business and labour have a major influence in shaping these institutions. While the skill development system is often influenced by changing skill demands stemming from economic, political and technological challenges, including those arising from globalisation, it is also shaped by how the stakeholders respond to these challenges by creating or changing the institutions that comprise the skill development system.⁵ The responses to such challenges are shaped by negotiations, compromises and agreements between the actors with different interests, under specific power relations and circumstances. It is important to note that these tripartite relations affect not only outcomes in the world of work (industrial relations) but also relations between government, teachers' unions, parents and business shape the education system. The nature of the education system, in turn, will affect the characteristics of the labour market and the manner in which people are trained (externally to enterprises or internally). Differences in skill systems thus reflect the accumulation of historical compromises and agreements between the tripartite actors in overcoming these on-going challenges. In Japan these historical negotiations, compromises and agreements – or *social dialogue* – produced an internally-oriented or company-centred skills development system based on long-term employment practices. By contrast, a different set of power relations and social dialogue in Singapore gave rise to an externally-oriented skills development system under the strong leadership of the state.

⁵ The impact of technology on skills can vary considerably (Crouch, Finegold and Sako 1999).

In the case of Singapore, the large presence of multinational companies in the economy is arguably an important factor shaping the skills system.⁶ It is difficult, however, to assess how important the nationality of firms has been in shaping the system when the activities of multinationals have been guided by the government's strategic objectives and affected by domestic institutions. The large presence of multinationals can indicate the country's deep integration into the global economy, although it can be argued also that, when facilitated by government, foreign enterprises are deeply integrated into the domestic economy. As a result, the present study analyses how this factor, along with others, are mediated through domestic political economy processes.

The study thus argues that different skill development systems are a historical construct of the interests, interactions and underlying power relations among the stakeholders, rather than the direct effect of one or two dominant economic, historical or political factors.

The study proposes five key factors affecting the relations and interactions between the actors. These factors provide a useful framework for understanding how the skills development system evolved differently in the two countries. These factors are:

- (i) *major historical disjuncture*: military threat, defeat or occupation; civil war or revolution; major social and economic upheavals and restructuring; unexpected independence as a sovereign nation;
- (ii) *periodic economic and social challenges*: economic recession; demand for higher productivity, technological advancement and competitiveness; social demand for educational opportunity;

⁶ The main argument that is made is that multinational companies are unwilling to invest in the skill development of the local workforce. Several situations in Singapore support this observation. First, the Singaporean government endeavoured to strengthen the skill base to attract these companies. Second, the under-investment in skill development by enterprises has been an issue for a long time (until the 1990s). On the other hand, multinationals did collaborate in providing training through the establishment of joint training centres, as facilitated by the government (the Economic Development Board) in the late 1960s and in the 1970s. Although a full account is not available, Japanese and German multinationals at least did try to invest in training, although they complained that high labour turnover was a bottleneck to investing in training. In addition, large multinational companies are currently often the recipients of national awards for investing in skills.

- (iii) *internal dynamics of each actor*: cohesion and internal politics within each actor; each actor's capacity to remain responsive to members; ability to draw upon wider support from society; nationality of enterprises (i.e. foreign or domestic);
- (iv) *formal structures for negotiations*: legal regulations, formal organisational structures for articulating interests and concerns; and,
- (v) *path dependence*: the continuing effect of existing institutions and decisions.

At a conceptual level, therefore, this study proposes that a major historical disjuncture can condition power relations in society and lay the basic path for institutional development. However, such institutions will continue to be shaped by negotiations, compromises and agreements –social dialogue– between the tripartite actors in responding to more periodic economic and social challenges. Once they are established, institutions can also have a lasting effect by continuing to guide the basic course of the skill development system. A drastic change in the system and its institutions is still possible, however, as a result of fundamental changes in the relationship between stakeholders. This can occur either as the result of a major historical disjuncture or more gradual change in the interests of stakeholders associated with long-term social change.

1.4 Pursuing the analysis

The main arguments are pursued by the examination of the historical evolution of the skill development systems in post-war Japan and post-colonial Singapore. The major historical disjunctures and the periodic economic and social challenges are identified and then the processes by which each actor responded, negotiated and agreed to deal with such tripartite challenges are analysed. The analysis of the interactions also explores the internal dynamics of each camp, as such dynamics also influenced their impact on institution development. The defeat in the World War II and the subsequent occupation in Japan, and the sudden independence of Singapore as a sovereign nation are conceptualised as major historical disjunctures. As for periodic challenges, they

include: for Japan, the technology/productivity challenge of the 1960s; social demand for education opportunity in the 1960s; economic shortfall in the early 1970s; and a decade-long recession in the 1990s. For Singapore, the accelerated economic restructuring in the late 1970s and early 1980s; education reform in the late 1960s; economic recession in 1985 and the Asia financial crisis in the late 1990s are included. Each factor is analysed and followed by an examination of its impact on the evolution of the skill development system.

1.5 Methodology

Adoption of a historical-comparative approach

The study adopts a historical-comparative approach. My interest in explaining the evolution of skill development systems makes an historical approach indispensable. In this thesis, comparative history is used, on the one hand, to develop a general explanation for the formation of skill development systems, while, on the other hand, it is used to contrast the cases. The comparative method is used, first of all, to demonstrate the significant influence of tripartite interactions (over employment issues) on the evolution of skill development in both national contexts. The study develops five common factors influencing those tripartite interactions. At the same time, the comparative method is used to provide a full account of the different historical contexts that conditioned the interests and actions of stakeholders as they responded to challenges. Differences in political dynamics and power relations between these stakeholders in the two countries conditioned their responses, and resulted in different outcomes: i.e. different systems.

The approach is similar to the *parallel* approach which Skocpol and Somers (1980) suggest is one of three methods of comparative historical analysis. Comparison, or more precisely, multiple cases, are used to demonstrate the general relevance of a theory. In my case, however, it is more an 'approach' than a theory that is being demonstrated. At the same time, however, the thesis seeks to explain the differences between the country cases. In this way it resembles what Skocpol and Somers (1980) call the *contrast-oriented* approach. Contrast-oriented comparative historians are

aware of general issues but are sceptical of “received social-scientific theories” and tend to emphasize the “historical integrity” and uniqueness of each case (ibid.:178, 192).

It is not contradictory that this thesis combines parallel and contrast-oriented approaches, operating at different levels. Skocpol and Somers argue that many historical-comparative analyses are based on such a *combined* approach. They note that “even as the theoretical arguments are being demonstrated through such parallel case accounts, contrasts are also being made” (ibid.:189).

My attention to tripartite relations was partly influenced by the approach of Wolfgang Streeck (1992b; 1997a) to the evolution of industrial relations in Germany, but was more significantly affected by my own initial investigation of the two cases. In reality, the back-and-forth between theoretical exploration and empirical analysis prompted me to adopt a conceptual framework that centres on the significant role of the interests and interactions of stakeholders, on their power relations and on the economic and social challenges that conditioned these relations and subsequent actions. The five factors discussed above are used to form a common comparative framework for analysing the two country cases and for demonstrating the main argument: the significant role of the interactions between stakeholders. At the same time, the methodology allows for the differences to be highlighted. In short, tripartite relations are significant for both countries, but differences in tripartite relations resulted in the establishment of different skill systems.

The choice of this methodology, however, has influenced the degree of theorisation that the present study can support. While the study develops a framework of five factors, the answers as to how and to what extent each factor affected the final result are embedded in the accumulated, peculiar historical context. It is not possible to provide, for instance, the exact configuration of the factors which would lead to the rise of a certain skill system. The development of a more general theory requires another level of comparative analysis, perhaps by testing the causal impact of each factor on a broader range of countries. The present study demonstrates the significant role of tripartite relations in the formation of skill development systems, but the applicability of this general approach is, so far, limited to the national cases studied here.

Selection of cases

My first motivation in selecting Singapore and Japan derived from the limited number of studies comparing countries within East Asia. The heightened interest in education and training in East Asia and its contribution to the region's economic prosperity, in particular since the mid-1990s, prompted a number of inter-regional comparative studies. Many of them typically contrasted the East Asian cases with Anglo-American market-led models to examine different patterns of economic development and/or different types of capitalism (Berger and Dore, 1996; Crouch, Finegold and Sako, 1999). In the field of education and training, a similar inter-regional comparative analysis was undertaken to examine different national routes to achieving a 'high skills' economy and how the models adjusted in the face of globalisation (Brown, Green and Lauder, 2001). While Japan and Singapore were included in that study, the primary objective was to demonstrate different high skills models between regions; intra-regional comparison was not intended. As noted, the study by Ashton *et al.*, (1999) is perhaps the only major study which has compared the development of education and training within East Asia (Singapore, South Korea, Taiwan and Hong Kong). The exclusion of Japan from that study encouraged me to compare Japan with another developmental state country.

Secondly, Japan and Singapore were chosen as cases because they represented ideal types of the developmental state, while they demonstrated distinctively different skill development systems. Studies of East Asia focus considerable attention on the proactive role of the state in driving the process of rapid industrialisation and economic growth (Amsden, 1989; Wade, 1990; Johnson, 1982). The concept of the developmental state was first developed by Johnson (1982) in his analysis of the role of Japan's Ministry of International Trade and Industry (MITI) in shaping industrial policy in the post-war era. Singapore is a strong example of a developmental state and, in particular, is seen as an ideal type in terms of building a successful skills system (Ashton and Green, 1996; Ashton *et al.*, 1999). Both countries experienced a major historical disjuncture (i.e. Japan's defeat in the war and Singapore's unexpected independence) and then sought rapid economic growth. Both countries aimed to

achieve the latter objective through a capable government that proactively guided the course of economic development and invested in the development of human resources.

Despite these similarities, Japan and Singapore exhibit different skill development systems. I wanted to compare these two ideal types of the development state and see how differences may have led to the creation of different skill systems. It was hoped that the comparison would allow me to assess the extent of state action and highlight other factors at play in the evolution of skill systems. This might allow me to add a new dimension to understanding skill systems in the region.

Thirdly, a piece of Singaporean history also intrigued me and urged me to compare the two countries. Singapore, in fact, attempted to emulate the skill development system that was prevalent in Japan in the early 1980s. For various reasons, the attempt was not successful in the way it was intended. This was, for me, rather interesting, given the dominant influence of the state in the country. While I was familiar with the influence of non-state forces in post-war Japan, the event hinted to me that there was more at play in Singapore than just a strong government. While the extensive role of the state has been much highlighted in understanding the development of the skill system in Singapore, to explore such a role in relation to other societal forces would be, I thought, challenging but interesting. My interest in exploring tripartite relations in both countries gradually consolidated as a result.

Finally, but not least, my choice of the national cases was influenced by the *High Skills* research project in which I participated as a research officer at the early stages of my doctoral study. The project explored different national routes to achieving a high-skills economy by comparing Britain, Germany, Japan, South Korea, Singapore and the United States.⁷ While the project had its own specific scope, objectives and findings, the research work that I undertook for the project allowed me to deepen my knowledge and interest in the two countries.

⁷ The project was funded by the Social and Economic Research Council (ESRC) of the U.K. (1997-2000). The project led to the publication: *High Skills: Globalization, Competitiveness and Skill Formation* (2001) by Phillip Brown, Andy Green and Hugh Lauder.

Sources

The main method used in examining the national cases is a critical review of the existing literature, which covers the multi-disciplinary areas of economic development, industrial relations, human resource management and education and skill development. The review includes general histories of these subjects; however I have also sought out and used industry- and enterprise-specific material to provide a fuller account and concrete illustrations. While such material is available for Japan, there are few sources of this nature for Singapore. It was not possible, as a result, to provide enterprise-based experiences for Singapore, as much as I could for Japan. This was a major bottleneck in my attempt to demonstrate the argument with a similar depth of analysis for the two countries.

It is a 'critical review' of the literature in a sense that the analysis of the interactions between stakeholders is based on material drawn from different political perspectives. By using contrasting material, I was able to avoid being locked-in to a dominant view and instead could develop a more balanced approach. I attempted, for instance, to collect and analyse the views of each tripartite actor over a common challenge (e.g. policy reform or economic difficulty). Furthermore, macro-analytical accounts (i.e. the history of the education and training system; or the history of the country's economic development) were contrasted with, or complemented by, industry- or enterprise-based studies as much as possible. This has meant, however, that the focus has tended to be on large enterprises and thus the overall characterisation of the skill development system in Japan in the present study relates mostly to these larger enterprises.

While the study is based largely on secondary sources, primary documentation, such as official memoranda, policy papers, government statistics and institutional autobiographies of organisations and companies, are also used. In addition, the study draws on interviews with policy makers, employers and educationalists in Japan and Singapore which were undertaken for the *High Skills* project. Although these interviews did not specifically address the research questions of the present study, they provided me with rich background information. Some of the interviews were particularly useful in illustrating key issues or arguments.

1.6 Structure of the study

The study consists of nine chapters, including this introductory chapter and the conclusion. This introduction had outlined the research question; the theoretical approach to the question; the main arguments; and how the research was undertaken. Chapter 2 elaborates the analysis of the existing theoretical approaches to understanding skill development systems. By analysing the strengths and weaknesses of three approaches, namely the human capital, cultural and institutional approaches, the chapter highlights the importance of taking an institutional approach. However it indicates that the approach does not provide sufficient account of the evolution of a system. The chapter concludes with a suggestion that the formation of institutions reflects the outcome of interactions between tripartite actors.

Chapter 3 elaborates my theoretical understanding of the evolution of skill development systems. The chapter defines the relationship between institutions and the skill development system and presents a basic conceptual framework for how such systems are established. By drawing upon insights provided by Marxist and developmental state perspectives on the state, business and labour relations, the framework introduces the five key factors affecting the formation of institutions, which were mentioned in the 'Main arguments' section above.

Chapters 4, 5 and 6 apply the theoretical framework to the case of Japan. Chapter 4 analyses the period between 1945 and the early 1960s. It analyses: i) the changing relations between the tripartite actors in the aftermath of the defeat in the war and the subsequent occupation; and ii) the evolution of key institutions for skill development under those particular circumstances. Such institutions included: long-term employment practices; the seniority-based wage structure; and autonomy of the education sector. Chapter 5 analyses the process by which: i) these institutions continued to provide a basic framework for negotiations between employers and employees despite the economic and technological challenges of the 1960s-1980s; and ii) how these institutions facilitated the evolution of the company-centred skill development system. Chapter 6 analyses the continuity and change of the institutions

and the broader skill development system in the light of the economic recession in the 1990s and beyond.

Chapters 7 and 8 present the case of Singapore. Chapter 7 examines the historical disjuncture in 1965 which prompted the rise of the state and the process by which the contested interests of society were settled to support the state's leadership after difficult negotiations, conflicts and compromises. The state pursued a multinational company-centred economic (and employment) strategy and restructured labour for it to be supportive of state objectives and actions with the promise of creating jobs and achieving national economic prosperity. The contested interests in shaping the public education system were also settled as the state was determined to make the system responsive to the needs of the economy. Chapter 8 examines the institutions and characteristics of the labour market that evolved after the early 1980s and their impact on the skill development system. Based on the dominant position of the state (over other societal forces) established by the end of the 1970s, the state built the broad infrastructure for skill development. The analysis, however, also demonstrates that the state struggled to entice enterprises to invest in training, because the fluid labour market and flexible/performance based wage structure mitigated against such an effort. The chapter ends with an analysis of the latest skill challenges that question the state-led system.

The concluding chapter revisits the main arguments of the thesis in light of the analyses provided in the empirical chapters.

Chapter 2 Theoretical approaches to skill development systems

The ways in which people learn at work (and are encouraged to learn at work) are influenced by a range of factors, which can be social, economic, political and/or cultural. However, there are two main approaches to understanding the learning process and they relate to whether behaviour is a product of individual agency or structure. In the field of skill formation, rational choice theory, which is closest to the paradigm which emphasizes individual agency, provides a theoretical basis for human capital theory, while the cultural perspective presents an example of the paradigm opposite of individual agency. However, recent advances in the theoretical approach to skill formation have not been based on emphasizing either approach but on combining them. New institutionalism, which came to be formalised in the 1980s, provides the perspective in which even though the individual's actions may be based on calculations of self-benefit, institutions set the framework for individual action and thus condition the options for action. Although the new institutionalism has difficulty in defining its boundaries and solidifying its definition, it is a theoretical advancement from the previous approaches, as it is better equipped to understand how an individual's behaviour and her social environment are interrelated.

This chapter analyses the evolution of theoretical approaches to skill development systems. The main objectives are: 1) to establish the importance of institutional analysis for understanding variations in such systems; and, 2) to develop the notion that a skill development system consists not only of education and training organisations, but also includes employment practices, the wage structure and the articulation of formal education in the labour market which, together, form a broad incentive mechanism for individuals and firms to train.

To do so, the chapter first analyses human capital theory and the cultural perspective to skill formation by highlighting their strengths and weaknesses. Then, it turns to analysing the evolution of new institutional theory and demonstrates the link between institutions and individual behaviour. This includes a discussion of the basic theoretical assumptions of, and the variations within, the new institutionalism. By doing so, any confusion that tends to arise from the various definitions and theoretical assumptions claimed as 'new institutionalism' will be avoided. Having discussed the broad base of institutional theory, the chapter then presents institutional approaches to skill development systems. This analysis highlights the need to explore the formation and evolution of institutions and relates the analysis to the skill development systems of East Asian developmental states. The chapter concludes with a suggestion that institutions evolve as outcomes of compromises and agreements between various stakeholders with different interests, and that therefore it is important to examine the formation of institutions through the lens of the interactions between the state, employers and workers. This issue will be the subject of the next chapter.

2.1 Human capital theory

Rational choice was the theoretical and analytical basis for human capital theory which was first developed in the 1960s. Training provision and participation are analysed and assumed as outcomes of an individual's utility maximising behaviour, as individuals are 'assumed to behave autonomously as individuals, based on either socio-psychological characteristics or on rational calculation of their personal utility not constrained by either formal or informal institutions' (Peters, 1999). In this perspective, the analytical focus is on the individual, and collective behaviour is reducible to individual behaviour. What is missing is the notion that learning behaviour varies depending on the work context and is thus influenced by institutions.

Human capital theory formalised the value of the productive capacity of individuals, which is a function of skills and knowledge. The theory acknowledged that labour was not monolithic, but that different levels of skills and knowledge differentiated labour and were reflected in different wage levels. The idea was

conceived in the 1960s when data revealed that a substantial portion of the growth in income in the United States could not be accounted for by the growth in physical capital and basic labour, and thus suggested the importance of education in promoting economic development (Shultz, 1971). By initially attempting to analyse the rate of return on college education, Gary Becker (1964) developed a general theory to explain firm and individual behaviour in terms of investing in training, based on expected returns. Firms are more willing to train employees in company specific skills, because specific skills yield greater returns to the firm compared to general skills, which workers might take with them to rival firms. The firm will invest also in general skills as long as the cost does not exceed the return. In this case, the firm does not benefit from the investment if the trained workers leave soon after the training. The longer that trained workers stay with the company, the greater the returns to the firm. As a result, the firm's rational calculation to maximise its return on training investment results in a correlation between job tenure and training investment (Becker, 1962, 1964). For their part, individuals opt to invest in their own education based on calculations of the return on their investment (e.g. time, expense). Becker explains that the level of college enrolment increased in the US in the 1980s, despite a demographic decline and higher tuition, since the financial benefits of a college education rose even faster than costs, and high school graduates responded to the high overall benefit (Becker, 1962:18).

At a general level, the theory provides a useful account of skill formation as it highlights the motivations of firms and individuals to invest in training. At the same time, the view that a higher investment in education and training yields greater national economic output has provided strong theoretical support for policy makers to expand national education and training systems over the last several decades. The idea of 'better education leads to better pay' often does motivate people's investment in education. The theory of the firm's and the individual's behaviour in training investment is also convincing at the general level. However, a closer look at human capital theory highlights several of the unrealistic assumptions on which the theory is based.

The first problem with the theory concerns its notion of rationality. It assumes that individuals participate in education and training based largely on their calculations

of the expected economic returns, notably wages, from that investment. In other words, the theory accounts for individual behaviour based largely on economic rationality, when in fact such rationality is only a partial explanation for learning motivation. At work, specific institutional arrangements, such as work organisation and the employment system, influence workers' willingness to participate in training. If work is organised in a way which allows individual initiative and judgement, and provides challenges on the job, it may motivate workers to train, and train more effectively as they see an immediate connection between work and learning. If corporate culture is such that workers' suggestions are considered seriously by management, which values two-way communication rather than top-down communication, it may encourage workers to utilise their skills. If management values long-term relations with employees and cares for their personal welfare, it may help to nourish an employee's personal bond with and trust in the company; workers may associate the company's welfare with their own. If it is not due to organisational attachment, one might still be motivated to invest in training to do a job well, as a function of professionalism.

A sense of attachment and trust to the organisation is an important source of motivation. One study has shown that a high rate of participation in training is likely if training is provided by employers or trade unions, while there are lower rates when participation must be initiated by individuals (Arulampalam and Booth, 1998; Elias, 1994). A correlation between high participation rates and union membership is particularly noted in studies of U.S. and British workers (Elias, 1994; for a review see also, Greenhalgh and Mavrotas, 1994). Another study in Britain shows that the allocation of training places is made by the employer to reflect employees' aspirations and ability to benefit from training, in addition to a high probability of remaining with the firm after training (*ibid.*).

Culture and social class are also important factors influencing attitudes for learning. In societies are strongly influenced by Confucianism, for example, people regard education highly regardless of social background. Human capital theory portrays individuals as independent of the social and institutional context in which they live and from which they make choices about how to behave. No individual lives out

of his/her social context, and thus reducing individual behaviour to mere economic rationality is a rather crude assumption.

In terms of the firm's investment in human capital, the theory also assumes that firms behave irrespective of the institutional context in which they operate. As mentioned, the theory may explain the general pattern of firm behaviour regarding training investment, but it does not explain the firm's behaviour in more institutionalised economies, such as Germany and Japan. The firm in these countries (particularly Germany) does offer both general and specialised training because its institutional arrangements – between firms or between social partners – reduces the risk of generating a market failure. The potential failure is that employees trained in general skills may leave the firm before the firm reaps the benefits of its investment in training. This is not to deny the basic theory of firm behaviour as depicted in human capital theory. Instead, firms in Germany and Japan might have established such institutional arrangements precisely because firms would behave as the theory suggests (under-providing general training) without such arrangements. However, this example points out that to understand a firm's behaviour, one needs to first understand the institutional environment in which it operates. The firm may operate rationally, but it does so within its environment. Its rationality is relative, and is conditioned by the specific institutional and cultural context.

Another weakness of human capital theory relates to its focus on the individual as an analytical unit and the assumption that collective behaviour is reducible to individual behaviour (so-called *methodological individualism*). The theory assumes that skill acquisition at the individual level automatically leads to higher productivity (Becker, 1964) or aggregates to national economic growth (Schultz, 1971), thus treating the process which takes place in-between as a 'black box' (Brown, 2001:25). However, the relationship between skills, productivity and work organisation is mediated by the employees' willingness to train and work towards increased productivity, which is heavily influenced by social and institutional elements and thus cannot be captured solely by economic rationality. The extent to which individual workers are willing to utilise their skills and engage in teamwork can be strongly influenced by social motivational factors (including flat hierarchy; greater delegation of

responsibilities). Similarly the ways in which firms guide workers to engage in continuous improvements in the existing production system and in new models are also dependent on the specifics of work organisation (e.g. teamwork; QCs) as well as the nature of products and services. Greater productivity and innovation can be sought in different ways and thus will define the types of skills that firms value highly. While human capital theory tends to regard skills as monolithic, social skills and learning skills bear significant importance in the Japanese workplace, while occupation-based technical skills define skills in the German workplace.

In this regard, the impact of technology on skill demand varies. The discussion above suggests, contrary to human capital theory, that there is no logical progression from low-skill demand to high-skill demand (Brown, 2001). The study by Crouch, Finegold and Sako (1999) confirms this point that the impact of technology on skills is variable.

In terms of the international comparative study of economic development, skill acquisition at the individual level does not necessarily add up to economic growth at the national level. Despite similar levels of investment in education and training, levels of economic development can vary between countries (see, Ashton and Green, 1996:ch. 2). This suggests that different countries have different mechanisms to mobilise and translate the stock of human capital into greater productivity and economic growth. Since human capital theory treats the process of skill formation as a black box, it does not provide an adequate explanation for the institutional mechanisms that generate different processes of skill formation. As far as this study is concerned, therefore, human capital theory cannot provide a satisfying explanation for the variations in skill development systems in different countries.

2.2 Cultural perspective on skill formation

As far as studies of skill formation are concerned, the cultural perspective presents an example of the paradigm opposite of individual agency. The cultural perspective accepts the existence of collective life, which is not reducible to the decisions and actions of individuals, and thus it provides a greater appreciation of collective forces in

moulding individual behaviour. The basic theoretical premise for the development of the skill system is that the ways in which people work and learn at work largely reflect national cultural orientations.

Hofstede (1980) demonstrated the variations in national values¹ in a comparison of Western (US, Netherlands) and Eastern (Japan, Singapore, Malaysia, Thailand, Philippines, Indonesia) countries. He showed how these values correspond with the distinctive management ideas and practices prevalent in the East and West. Values (broad preferences for certain states of affairs over others) are the main aspect of culture (Hofstede, 1987:134). According to his study, all Southeast Asian countries show value inclination toward 'collectivist and large power-distance relations', and these inclinations impact on their human resource development practices. For example, collectivism indicates that 'relationships among people are never impersonal, always personal, and guided by moral rather than calculative considerations' (ibid.:137). The large power-distance suggests that 'within society at large and within organisations, relative statuses are more important than in the U.S. and the Netherlands, and that the personal relationship in Southeast Asia almost always contains a vertical element: father-son, older brother-younger brother, teacher-student' (ibid.). On the grounds of these cultural differences, Hofstede challenged the universality of management theories, which had largely developed in the U.S., by arguing that management ideas and practices are based on particular national values. Similar arguments have been made by Hampden-Turner and Trowenaars (1993) in their seven-country study on the cultures of capitalism.

Different cultural traits in management practices are apparent and supported by a number of empirical studies. The study of overseas Chinese management practices in different Asia-Pacific countries highlights strongly similar practices, which reflect Chinese culture and values (Redding and Hsiao, 1990). A study on management styles in Korean chaebols identified three major characteristics: self-made founders, management by family and close government relations, and attributes the practice of management by family to the Confucian tradition (Yoo and Lee, 1987). These

¹ Hofstede established variations in national values by assessing four dimensions: 1) individualism versus collectivism; 2) large versus small power-distance; 3) strong versus weak uncertainty avoidance; and, 4) masculinity versus femininity.

traditions are based on hierarchical order within the family, and for bureaucratic relations, paternalistic leadership and top-down decision making. The highest priority is given to inheritance, for example to the eldest son, who will succeed the founder-owner (ibid.:7). The implications of these cultural characteristics for business practice are extended by Fukuyama (1995) in his work *Trust*. Chinese and Korean business practices lead to family businesses in which the prosperity of the business relies heavily on founders, and businesses tend to operate on a short-term, one-generation basis. As a result, the business tends to suffer when it is transferred between generations. Fukuyama suggests that they suffer from their inability to extend their family-like relations beyond immediate family/kin relations.² The implications for skill formation are short-termism and a one-way, top-down approach to management, with participatory teamwork and delegation confined to family members. Priority and care is naturally given to family members and thus in this context, the extensive familialism discourages active participation and skill utilisation by skilled, but non-family, workers. The context limits the scope for employers' investment in the training of non-family members, as well as employees' willingness to share their skills and knowledge in the workplace.

Cultural traits are also evident in Japanese management and, more directly, in skill formation practices. At the general level, these cultural traits can be found in collectivism and preference for maintaining group harmony and avoiding conflict. A social value in Japan gives high regard to education, which is derived from Confucian traditions, although the regard for education was emphasized for the warrior and aristocratic classes rather than the whole population until the establishment of the national education system in the late 19th century which stressed the importance of education for all. The features of skill formation such as quality circles (QCs) and the small-team approach, might be strongly supported by the cultural inclination towards collectivism, and it might explain why QCs came into practice more widely in Japan than in the US where the idea originated. A study which examined two divisions of a

² Fukuyama (1995:81) suggests three ways for the Chinese to overcome familialism and gain the benefits of large enterprises (economies of scale): 1) create network organisations to link family businesses; 2) encourage foreign direct investment; and/or, 3) mandate the state to promote or create/own large enterprises.

foreign-owned shipping company in Japan noted a significant difference in the managerial styles of Japanese and non-Japanese managers (for a review, see Dunphy, 1987). The early years of Japanese post-war economic growth is thus discussed by culturalists in terms of the unique features of Japanese culture, and thus its cultural myths.

Although the cultural factor is an important element influencing individual behaviour, there are several weaknesses in applying the cultural perspective to the analysis of the development of skill systems. While the importance of the cultural factor is undeniable, there is also too much emphasis on the collective nature of individual behaviour. This tends to result in stressing uniformity, due to the cultural effect, and implies very limited space for individual agency and individual differences in human behaviour. Thus, the cultural perspective has difficulty in explaining the variations of learning and working behaviour among workers within the same cultural context. Differences which exist in individual behaviour between large and small-medium sized companies or between manufacturing and service companies are notable examples. The problem with the culturalist perspective, depicted by these Japanologists, is that it treats culture as free-floating ideas without showing their material basis and embeddedness in institutional conditions. Recent work on Japan's economic success has increasingly discussed such success more as the effects of the unique structure and practices of business and work, while treating cultural elements as something embedded in such unique structures and practices (e.g. Johnson, 1982; Dore and Sako, 1998).

While cultural traits might be evident in management practices in different national contexts, the extent to which a national culture influences the *establishment* of such practices and other institutional arrangements is difficult to ascertain. The implications of the cultural perspective for the origins of institutions are that the establishment of practices and institutions can be traced to national cultures. However, there is quite a large gap between national values and organisational values and practices. As discussed, Hofstede (1980) showed the variations of national values in terms of four categories (see previous footnote). His qualitative data on national values

indicate the cultural *conditioning* of management ideas and practices, but does not indicate that similar national values lead to similar management practices.

The culturalist explanation is particularly weak in explaining the timing of the rise of specific institutions and the subsequent shaping of skill development systems. In the case of Japan, traditional values might be in line with so-called Japanese management practices and work attitudes in large companies, but those management practices have not always existed traditionally. Fukuyama (1995) may trace the paternalistic employee-employer relationship to the 19th century Japanese family structure in which non-family members were treated equally as family members once they became employees of the family. However, a study which examined a well-known family firm (Kikkoman) in Japan found that the system of job security and fringe benefits did not derive from family paternalism and was not characteristic of family-owned companies (for a review, see Dunphy, 1987). It argued that paternalism developed as a managerial reaction against union activism rather than as a management practice based on traditional values (ibid.:94). Koike highlights the non-discriminatory nature of Japanese management between blue- and white-collar workers in terms of the provision of uniform benefits within the company, as a distinctive characteristic of Japanese management. However, he noted that some degree of discrimination was present before 1945, but that those practices vanished with the war-time defeat, and thus the lack of discrimination was a reflection of, as he terms it, the “white-collarization of blue-collar workers” in post-war Japan (Koike, 1988:51). The origins of long-term employment and fresh-graduate-centred recruitment practices might be traced to the 1940s, but not before. The so-called Japanese management system was established only in the late 1960s (e.g. Kariya, 1995). Once militant unions restructured themselves, they become more cooperative in-house unions in Japan only after the 1960s. Thus, the culturalist perspective on skill formation tends to treat culture as ahistorical.

What is also weak in the cultural perspective is the notion of power relations between different social groups. From the more rationalist point of view, loyalty to remain with the company for a long time should be understood as a response to different incentive mechanisms, rather than as a cultural attribute (see, Dunphy

1987:89). It has also been argued that the traditional values which characterise Japanese management (including skill development aspects) are not a reflection of general cultural values, but rationalisations by Japanese managers to promote work attitudes and values which they find desirable for their business practices (see, Dunphy, 1987). It is also known that learning in large Japanese companies is based on extensive socialisation programmes which are, to a large extent, designed to inculcate and stress 'certain' values among new employees (Rohlen and LeTendre, 1998). This has led to a claim that 'traditional values [act as] rationalisations for novel practices' (Dunphy, 1987:95). The counter-culturalist arguments thus depict Japanese management practices as the result of power struggles between management and labour, which are not normally accounted for by the culturalist explanation. The emphasis on the effects of cultural traits in fact seems to undervalue the effects of major historical events and conflicts and of the critical decisions people took at specific points in history.

2.3 New Institutionalism

New institutionalism developed in the 1970s and 1980s as an interdisciplinary reaction against the dominant perspective in the social sciences at the time: rational choice theory. The reaction against rational choice came from various disciplines and commonly stressed the social embeddedness of individual behaviour. This reaction lay the foundation for what came to be called the New Institutionalism.³ A basic argument of new institutional theory is that even though an individual's actions are often based on rational calculations of self-benefit, institutions set the framework for individual action and thus *condition* the options for action. Institutions here refer to such elements as shared values, rules, incentives and regularised patterns of behaviour, although I will return to the issue of definition later.

³ In political science, institutionalism in the pre-war and immediate post-war periods focused on formal rules (laws, constitutions) and organisations (legislatures) that constrained action. Following a focus on roles and behaviour in the 1960s and early 1970s, political science rediscovered institutions (hence 'new') but has focused on both formal and informal rules (norms) and on both the choices and the constraints faced by actors (see, Searing, 1991:1240-1). In economics, new institutionalism also embraces both formal and informal rules and the balancing of choices and constraints (see, North, 1990).

2.3.1 Evolution of new institutionalism

As far as the study of skill formation is concerned, three broad theoretical perspectives can be highlighted as having constituted the counter-arguments to rational choice theory: organisational theory, the state approach and neo-corporatism. All of them highlighted the importance of structural and institutional elements in understanding individual behaviour, although they did it so at different levels; the organisation, the state and state-society relations, respectively. It is worthwhile looking into the evolution of these different theoretical perspectives to appreciate their application to the analysis of skill development systems.

Organisation theory highlighted the importance of organisational culture and norms in shaping individual behaviour (Ott, 1989). In the U.S., political scientists such as Skocpol (1985) and Almond (1988) argued against the excessive focus on individual actors as a source of political change and outcomes, and called for 'bringing the state back in' to the analysis of political behaviour. They did so by highlighting that the state's institutional structure provides the parameters for political actions and outcomes. The re-emphasis on the state in the U.S. was paralleled by studies of 'miracle' economies in East Asia, many of which highlighted the instrumental role played by the *developmental state* in guiding the process of rapid economic growth. As discussed in the next chapter, these studies on East Asia were mainly a reaction against the dominant economic growth model based on neo-classical economics (Johnson, 1982; Amsden, 1985, 1989; Wade, 1990). However, the fact that the studies pointed to the importance of the state contributed to the growing appreciation of the importance of institutions, in which the state constituted the main part. Neo-corporatism highlighted the institutional effects on the behaviour of social actors involved in industrial relations (Streeck and Schmitter, 1985).⁴

The new institutionalism grew out of these wide theoretical movements against rational choice theory. As noted, the strength of institutional theory is its greater appreciation of the so-called 'social embeddedness of individual behaviour', as it

⁴ This perspective developed partly as a reaction against the rational choice assumption. However, it also grew out of liberal-corporatist ideas, in part in resistance to attempts at 'bringing the state back in' (Streeck and Schmitter, 1985).

considers individual behaviour to be *conditioned* by institutions. The notion of 'embeddedness' or 'conditionality' is fundamentally lacking in the basic individual utility-maximising assumption. Individuals work and learn differently, for example, in different work organisations even within the same cultural context.

The establishment of the 'new institutionalism' as a school of thought took place later because, to a large extent, empirical studies preceded the theory.⁵ In contrast to the conventional rational choice school, where the theory was established first and empirical studies followed later to test it, there was initially little attempt for the empirical studies of institutions to theorise. New institutionalism as a school of thought was thus established only after theorisation of institutions took place. This evolution reflects the fact that there is no single theory of new institutionalism; instead its evolution is supported by empirical studies in different theoretical areas. This is the main source of the problem in defining the new institutionalism because its boundaries can be broadened extensively, if traced back to various empirical works. Neo-corporatism is sometimes included as part of social institutionalism (as part of new institutionalism), because institutional analysis can be extended to state-society relations.

2.3.2 'Institutions' in the institutionalists' schools

The definitions of institutions are found in three schools of institutionalism: rational choice institutionalism; sociological/normative institutionalism; and historical institutionalism. Analysing these definitions will help us to specify, later in the chapter, the key institutions which are critical for the evolution of the skill development system.

Rational choice institutionalism is not to be confused with rational choice theory. A major difference is that the former accepts and emphasizes the greater influence of institutions, which is not the case for the latter (Peters, 1999). Yet, rational choice institutionalism still accepts the basic assumption of conventional rational choice theory that an individual makes choices based on personal utility maximisation

⁵ The development of new institutional economics follows a more conventional pattern, however, in that the theory was developed first (i.e. Williamson, 1985).

(ibid.:15). This perspective views the formation of institutions as a rational response to economic and social problems, and institutions evolve to tackle new problems. In this version of institutionalism, institutions are conceptualised as *collections of rules and incentives that establish the conditions for bounded rationality* and this conceptualisation of institutions as rules is common in institutional economics (ibid., 1999; North, 1991; Knight, 1992).

Rational choice institutionalism inherited the old institutionalist tradition, which finds institutions to be a potential source of constraint and control over individual self-interested pursuits (in an extreme sense). The assumption here is that without institutions, individual behaviour would lead to 'dysfunctional behaviour such as free riding and shirking' (Peters, 1999) or 'chaotic and socially destructive situations' (Immergut, 1998). Although this position is based on the notion that the individual inherently attempts to maximise self-interest, it suggests the possibility that institutions would set parameters for the action people can take, and the narrowed options for action provide greater probability of their actions, which offers a degree of stability (as opposed to chaos). Or, to put it more positively, institutions "are capable of producing some predictability and regularity of outcomes that benefit all participants in institutions...[like] business benefiting from a regulatory regime established by governments" (Peters, 1999).

In order to constrain and control individual behaviour, 'institutions' in rational choice institutionalism mean 'rules' as discussed above. Institutions are however not always considered to be *constraining* forces and instead they can possibly be *enabling* forces. Individuals pursuing their own self interests may willingly be constrained by institutions to follow rules, if they find that following rules makes it easier to achieve their goals. In this regards, 'incentives' become critically important for motivating the individual to follow the rules.

In sociological, or normative, institutionalism, institutions "consist of cognitive, normative and regulative structures and activities that provide stability and meaning to social behaviour" (Scott, 1992). In other words, individual behaviour may be conditioned by regularised patterns of interaction within institutions. The constraining (and enabling) forces are norms and belief systems rather than formal rules (ibid.).

This perspective does not assume that the basis of individual behaviour is utility maximisation but is norm-guided. Normative institutionalism considers individual behaviour as being shaped by accepting, consciously or unconsciously, *norms and collective values* which exist in organisations. Individuals interpret certain signs, symbols and routine behaviour independently, but they tend to act according to such norms. Individuals use the 'logic of appropriateness' as a reference for their actions rather than 'rules' and 'maximising self-interests' (ibid.). Individuals are more concerned about how their actions conform to such norms rather than what would be the consequence of their actions (Peters, 1999). In short, what individuals believe a 'good' employee or manager to be underpins their actions. This suggests the important role of socialisation in constructing belief systems.

Historical institutionalism depicts individual behaviour as the effect of the *historical past* in the form of institutions which set the limits of individual action. This highlights the 'path dependent' nature of individual behaviour (Krasner, 1988). While this provides a rather deterministic view of history, more recent work within this perspective suggests how institutions change as they compensate for the faults of institutions in the past or how major historical events can change the course of institutional development (Immergut, 1998).

2.3.3 New institutionalism and the skill development system

A growing number of recent international comparative studies on employment, management and skill development reflect this greater appreciation of the 'social embeddedness' of human behaviour and all point to the importance of institutions in conditioning behaviour. These studies tend to take a multidisciplinary approach and commonly combine aspects of the sociological and historical branches of institutionalism with a varying element of rationalism. These studies emerged partly as a response to 'convergence theory' developed since the 1970s. That theory suggested that technologies and markets were determinative of social and economic systems and thus systems in advanced industrial nations would converge in responding to the pressures of markets and technologies (for a detailed discussion of the issue, see Berger

and Dore, 1996). Many recent studies are devoted in demonstrating the diversity within advanced industrial capitalism and argue against the convergence trend (e.g. Crouch and Streeck, 1997; Berger and Dore, 1996; Katz and Darbishire, 2000). These studies demonstrate that institutional differences bring about diverse outcomes in terms of the ways in which nations or companies compete and the ways in which workers work and learn in the process. The empirical nature of these studies implies that their authors are not necessarily consciously taking the institutionalist's theoretical stance. In many cases, the theoretical discussion of institutions is rather limited, as they focus on highlighting the effects of institutions in a specific country. However, their considerable interest and analytical focus on institutions are much in line with the basic theoretical approach of new institutionalism.

In less country-specific terms, Finegold and Levine (1997) highlighted the importance of a set of institutions, such as cooperative industrial relations, internal labour management and employer cooperation in influencing employers' decisions on whether to train. They argue that without these institutions, the company will opt to seek alternatives other than investing in training and that this creates a situation which Finegold and Soskice (1988) called a 'low-skills equilibrium' in which both employer and employee do not have sufficient incentive to engage in training. These institutional mechanisms are often linked to broader national institutions, such as labour market regulations, and the coordinating mechanisms of the national economy. These include state planning and interventions; agreements among social partners (employers' and workers' organisations); and strong social conventions regarding business practices.

By analysing skill formation systems in Germany, Japan, Singapore, the U.K., the U.S., Ashton and Green (1996) developed six institutional conditions necessary for achieving high-skills based production and economic performance. Such institutional conditions are: 1) the commitment to achieving a high level of skill formation by the rulers; 2) a competent education system; 3) the commitment to high skill formation by leading employers; 4) the existence of regulatory institutions to overcome the training externalities; 5) the existence of incentives so as to obtain workers' consent to high skill formation; and, 6) a system which combines both on-the-job and off-the-job learning. They stressed the importance of the continuous support of the ruling political

elites in sustaining high-skills formation. In the analysis of East Asian newly industrialising economies, the study highlighted the role of the state not only in strengthening the supply of skills but also in stimulating the demand for skills.

The work of Wolfgang Streeck (1992b, 1996, 1997a) illustrates how a web of institutions functioning in the broader society mediates the diversified interests of social actors and has led Germany to be a high-wage, high-quality and high-skills economy. His analysis demonstrates how these institutions in Germany work as constraining forces while providing opportunities for making difficult but vital changes. Here are some examples. The unions and employers' associations have the right to regulate wages and working conditions without government interference, which results in immobility and predictability of business conditions and thus stable expectations, allowing companies to pursue long-term objectives (Streeck, 1997a:39). The co-determination and rigid employment legislation make it difficult for employers to dismiss workers, providing employment stability to workers. Based on sectoral agreements, the wage structure is pegged to different levels of qualification in given occupations. This not only motivates workers to take up more training but also prevents them from moving to other companies simply for higher wages. In addition to the German tradition, which regards professional competence highly, institutions can oblige employers to invest in training. Otherwise, he writes:

In institutionally 'thin' economies where training decisions are exclusively or primarily driven by market rational and economic motives, the supply of skills tends to be sub-optimal for advanced industrial production purposes (Streeck, 1992b:16-17).

The unique set of institutions has distinctive effects on the way people work and how they learn at work. In the case of Germany, Streeck elaborates that the nature of skills is very occupationally specific and, as such, occupation skills provide the individual with social identity and there is less motivation for workers to develop company specific or generalist skills. Teamwork does not involve a group of generalists all trying to come up with collective solutions, but a group of different professionals trying to solve problems by bringing together different skills (Streeck, 1996:147). The division between job and career is clear. The job belongs to the company but the career belongs to the person (ibid.:145). While Japanese workers identify themselves with

their company, German workers identify themselves with their professions. The fact that the occupational skills that people acquire are nationally recognised makes the holders of the skills mobile. However, as an occupation requires a qualification, occupational change is not easy to make.

The study by Kuruvilla, Erickson and Hwang (2002) indicates the distinctive institutional context which has enabled the renewal and upgrading of the skill development system in Singapore. Although a detailed account of this institutional context will be provided in a later chapter, the study highlights the layer of formal economic and education institutions –each with distinctive responsibilities for either identifying skill needs, creating the demand for skills or providing different types of training. These are coordinated at the national level and eventually developed the comprehensive system-wide skill development system from pre-employment to workforce training.

2.3.4 Theoretical implications for the evolution of institutions

The account of the workings of institutions depicted in these studies provides three important theoretical implications.

First of all, the skill development of workers is not the result of self-contained activities but rather the outcome of the intertwined institutional effect. Institutions consist not only of work organisation, employer-employee relations and production systems but also the coordination and negotiation which stem from the interaction between and interdependence of institutions in the broader society. The collective working of formal institutions is vital for such society-wide coordination to function. For instance, Streeck (1997a:52) argues that, “[c]o-determination is not based in the industrial firm and its competitive interests, but in the broader German political and institutional context”. Analysing the institutional conditions which allowed ‘diversified quality production’ in Germany, he writes:

today’s growing markets for diversified quality products can only imperfectly be served by an economy that is not also a society, that is one which is not in a particular way regulated and supported by thick, non-economic social institutions (Streeck, 1992b:10).

Secondly, individual learning behaviour is essentially based on rational choice; however what appears to be 'rational' is bounded by the intertwined institutional effect. Although it is not always explicit, the autonomous and rational individual, who maintains a certain distance from organisations and institutions, is the basis for Streeck's model of individuals albeit conditioned by these formal institutions.⁶ In this sense, although institutionalism tends to emphasise the conditioning effects on individual choice and behaviour, it does not deny the role of agency. At the same time, the focus on the effects of institutions allows us to avoid emphasising too much the collective aspect of social actions and prevents us from referring a matter to 'cultural myth', for example.

Thirdly, the distinction between formal and informal institutions reveals that 'institutions' have two dimensions. One is that the term 'institution' can be used to refer to formal organisational bodies such as industrial unions, work councils, employer associations, chambers of commerce, the nation-state and legal regulations. The other is that the intertwined institutional effect is exemplified in negotiation and coordinated actions such as co-determination and collective bargaining. While these coordinated actions can be legalised, thus formalised, such institutional effects can also take the form of implicit rules, incentives and shared understandings about how things (should) work, or what Scott (1992) terms 'the logic of appropriateness'. In relation to skill development, such shared understandings include: how the employment system works; how workers are valued, rewarded and promoted; what employers expect of employees and vice-versa; how education qualifications articulate in the labour market; how workers develop their careers, etc. These shared understandings are largely assumptions, but credible assumptions based on regularised patterns of behaviour.

In the cases of both Japan and Singapore, the informal workings of institutions come across more strongly than in the case of Germany. The much documented long-term employment practice in Japan is largely not legally formalised, but rather

⁶ The element of norms and values as a reference for individual behaviour remains in the form of German traditional culture and values, and well-practised behaviour over time might have a normative effect on individual behaviour. Thus, the effects of broader societal and cultural values are implicitly accepted. However, the normative elements seem to take second place to rational choice in his view.

customary and based on informal shared understandings between employers and employees. Such management systems have the effect of the 'emotional dispossession' by workers through identifying themselves with the firm (Dore and Sako, 1998). In comparison to Japan, the role of formal organisational bodies appears to be more prominent in Singapore. These bodies include the National Trade Union Congress, the National Wage Council and the government in general. However, there exists also the shared understanding at the national level, which is the notion that 'the national interest comes first' in order for Singapore to survive as a nation and to maintain its economic prosperity. Social cohesion and engineering in Singapore have been depicted as the effect of the 'communitarian' ideology of national survival (Chua, 1995a), which has provided the mandate and legitimacy for the formal bodies mentioned above.

2.3.5 Formation and change of institutions

Issues related to the formation and change of institutions are relatively unexplored within institutionalism. Studies do refer to these issues but do not focus on them. Indeed, a full account of formation and change is said to be one of the requirements for the future development of the theory (Knight, 1992; Peters, 1999:150). Nonetheless, some of the discussions provided by the different branches of institutionalism, and related empirical work, are worth reviewing.

In analysing the development of institutions, historical institutionalism highlights the importance of historical legacy in determining the course of institutional development in the future. Although history is a central focus of the argument, the analysis has been largely confined to demonstrating how current institutions are formed by precedent policy decisions and individual structures, rather than to exploring the origins of institutions.

In terms of the formation of institutions, normative institutionalism argues that an institution is formed partly as the product of individuals' involvement with the institution. Much of the evolution comes about as a result of the new values brought by new people to institutions (March and Olsen, 1984).

For rational choice theory, institutional change results from changes in rules and incentives for individuals within the organisation, presupposing that individuals equally respond to those changes to maximise their utilities. Another view is to see institutions and rules as human constructions (Grafstein, 1992). In this view, institutions are subject to the whims of the very people (or at least successors to these people) that created them in the first instance. In this view, rules are short-term constraints on behaviour, at best, with rules to some extent always being renegotiated among the members of the institution, or perhaps among several institutions (ibid).

More empirically, in the search for the institutional conditions of high-skills formation and strong economic performance, Ashton and Green (1996) questioned how these institutions were formed. By focusing on the origins of the commitment to high skill formation, the study takes a broad historical approach to highlight that such commitment was linked to the processes of state formation (historical conditions which led to the commitment of the ruling elites to skill formation) and industrialisation (different stages of economic development requiring different skills).

Streeck (1997a) writes that a distinctive set of socio-economic institutions reflects a compromise of political positions such as liberal capitalism, Social Democracy and Christian Democracy; between traditionalism and two alternative versions of modernism (liberalism and socialism); as well as between capital and labour (ibid.:34). He indicates that, in order to mediate the different and often conflicting interests of autonomous and rational individuals, formal institutions are to provide a formal place for negotiation and in turn the outcomes of the negotiations create 'institutions' often in the form of legally binding agreements.

Although the origins of institutions are not the focus of Streeck's analysis, the notion of historical compromise, in my view, marks the fundamental social context from which German institutions evolved thereafter. The intertwined web of institutions developed as a result of the compromise, and the negotiations which followed provided a future course for the development of formal institutional arrangements. More importantly, the historical compromise seems to have generated a shared value of compromise through negotiations for the benefit of all, at least in the area of industrial relations. However, it is important to note that the evolution of institutions depicted by

Streeck is naturally grounded in the specific political context of Germany, and thus there are limitations in applying the model to understand the evolution of institutions in countries with different political contexts.

A more concrete illustration of negotiation, compromise and the interactions of contested interests is provided in an historical analysis of engineering apprenticeships in Britain between 1925 and 1965 (Ryan 1998). The study showed the process by which the prevalent practice of employers' hiring of apprentices as a cheap substitute for adult labour in the 1920-30s posed a threat to trade unions. (It threatened employment opportunities for adults, unions' bargaining power and craft standards). This led the unions to bargain for representation, better pay and better training for apprentices to remove the incentive for employers to hire low-wage apprentices instead of adult employees. Initially, employers insisted on their right to manage apprentices and rejected the unions' call for apprentice representation, but they accepted when the apprentice strike broke out (1937) and employers needed the help of the union to restore discipline. The unions had several options in curtailing the substitution practice, including raising the quality of training. However, the union opted primarily to negotiate pay-increases for apprentices because they were easier to monitor than improved training. The unions' choice of strategy came down to the issue of enforceability. The case shows that the practice of apprenticeship was shaped by the interests and policies of employers and the unions.

The important influence of domestic conflict on the formation of skill development systems is also addressed in the above study by Ashton and Green (1996), with a focus on the role of the state in regulating the interests and behaviours of domestic actors. By analysing the case of East Asia's newly industrialising economies, the study examined the processes by which 'higher goals' (e.g. national economic survival) legitimized the state's political leadership over the contested interests of employers and workers and created the conditions for sustaining the high skills route. This role of the developmental state in shaping the skill development system will be explored further in the following chapter.

The notion of conflict leads to a particular conception of institution formation as the outcome of political negotiations. That is to say that what is 'appropriate' or not

(thus functioning as a guiding principle of individual behaviour) is constructed by specific social relationships or compromises made at the time of the construction of institutions. Institutions need a certain base, which supports their functioning. It may have to fit with people's mind-set, or be based on certain collective or social agreements. It is also important to note that such social relationships or compromises are influenced by particular international geo-political pressures (e.g. external military threat, the state of the international economy, international competitive pressures) at a given time in history. The formation of institutions thus reflects the particular nature of the internal political economy responding to these external geo-political pressures.

History may provide a path but cannot be deterministic. However, to look at a specific historical conjuncture and see its impact on institution building (and on learning at work) is worth investigating. It also allows us to avoid relying on traditional culture in understanding institutions, when, to a large extent, so-called 'culture' is historically determined. In short, if we take this position, we can still acknowledge the historical and cultural legacy but avoid historical (and cultural) determinism as change is based on 'negotiations'. The notion of compromise presupposes the individual as rational actor with specific interests, making one's own judgements, however restricted by one's own capacities and given one's institutional environment. This view gives room for agency and allows us to acknowledge the existence of individual differences even in collective action.

Conclusion

In summary, this chapter highlighted the role of institutions in shaping individual behaviour and argued for the importance of institutional analysis in understanding skill development systems. The analysis of new institutional theory and its application to institutions in understanding the variation in skill development systems clearly suggests that 'institutions matter'. However, the analysis also indicated that while the effects of institutions (i.e. the diversity of outcomes arising from different institutions) are well documented, the issues related to the formation and change of institutions are relatively unexplored areas of the new institutionalism. Further theoretical inquiry into the

formation of institutions suggests a conception of institutions as the outcomes of interactions between tripartite actors. This issue will be explored further in the next chapter.

Chapter 3 A framework for understanding the evolution of skill development systems

The skill development system consists of a set of institutions that guide the behaviour of individuals and firms to train. While schools and training institutes can be easily understood to be part of such institutions, some institutions, such as employment practices and wage structures, are indirectly linked to skill development. The general pattern of employment practise and the wage structure can shape the particular nature of the labour market (e.g. internally or externally oriented) which condition an individual's motivation to learn, and how and where they learn. In other words, these employment-related institutions are an important part of the system.

The study argues that the development of these institutions is an historical process by which the state, business and labour¹ respond to socio-economic, political and technological challenges. The responses to such challenges are shaped by negotiations, compromises and agreements between the actors (with different interests) under specific power relations and historical circumstances. The difference in skill development systems thus reflects an accumulation of historical compromises and agreements between the tripartite actors in overcoming common challenges. The interactions between the tripartite actors result in the creation of institutions which facilitate the development of a certain characteristic of the labour market. In Japan, they led to the development of an internally-oriented labour market and a company-centred skill development system, whereas in Singapore, they led to the development of an externally-oriented labour market and the state-led skill development system with emphasis on pre-employment and formal education and training.

¹ In the case of the formation of education institutions, parents also have been an influential interest group.

The purpose of the chapter is to elaborate the notion that the formation of institutions is the outcome of interactions between tripartite actors. After a brief review of the relation between institutions and the skill development system, the chapter examines how Marxist and developmental state theories analyze the impact of state, business and labour relations on the formation of institutions. By drawing upon insights provided by these two perspectives, and other ideas, the chapter then develops a framework to investigate the evolution of institutions through the lens of domestic stakeholders and their power relations. The framework introduces five key factors affecting the formation of institutions, namely; major historical disjuncture; periodic economic and social challenges; internal dynamics of each tripartite actor; formal structures for negotiations; and path dependence. The framework highlights the importance of the mediating role played by the internal political economy, rather than the effect of a single or a few economic, political or historical factors, in understanding the formulation of institutions. The final section elaborates the discussion on the continuity and the change in institutions and the broader skill development system.

3.1 Institutional approaches to skill development systems

The institutional approach argues that all of these institutions are important as they guide and regulate individual choice and action. The approach stresses the contextuality of human behaviour and suggests that understanding the institutional environment provides a key to understanding how people learn.

For this study, institutions consist of *arrangements or mechanisms, which provide rules, incentives and norms that guide and regulate the behaviour of individuals and firms to train*. Institutions include formal organisational bodies such as schools, training institutes, companies, trade unions and the state. These organisations embody these arrangements or mechanisms and therefore contain rules, incentives and norms which determine how particular organisations effect individuals. Institutions can also be regulatory arrangements or mechanisms, such as employment practices, wage structures and the link between the formal education system and the labour market. Such mechanisms can be formal (as the system of co-determination used in Germany to

decide matters related to work and labour), but they can also be informal, such as relational obligations, regularised pattern of behaviour and social norms (e.g. shared understanding of reciprocal relations between employers and employees).

These arrangements or mechanisms exist both at the organisational level as well as the broader sectoral or national level. At the company level there is a set of employment-related institutions such as: *employment practices; work organisation; wage structures; mechanisms for career progression; and the nature of employee-employer relation* (which can be broadly categorised as the employment system). This set of institutions at the company level is often linked to broader national-level institutions, such as: *legal regulations or other regulatory agreements between social partners on employment; characteristics of the labour market (e.g. fluid/external, or internal); co-ordinating mechanisms between the national economy and the formal education and training system; and the articulation of formal qualifications in the labour market*. This web of institutions and their interactions guide behaviour in skill development. The characteristics of a skill development system thus reflect differences in this complex set of institutions.

The present study conceptualises the skill development system as the cumulative effect of the employment and education related institutions. The study argues that *each* of these institutions evolves as the outcome of negotiations, compromises and agreements between the stakeholders. A change in one of these institutions can bring a change to other inter-related institutions, or even the collective working of the institutions. Each of these institutions and their interrelationship determine the characteristics of the skill development system.

While the above discussion explains the relationship between institutions and the skill development system, the important question is how these institutions were established and how they have evolved. A major thrust of the institutionalists' arguments in the field of skill development is that the variations in skill development systems reflect differences in institutions (see Chapter 2). However, the current institutionalists' work is limited in addressing the question of the evolutions of institutions. This question moves the research paradigm from the micro study of different incentive mechanisms for learning to a broader societal view, analyzing how

various stakeholders responded to such events or changes at the time of institution formation and evolution.

3.2 The state and the formation of institutions in East Asia

While the notion of institutions as historical constructs arising from social compromises and agreements provides an overarching framework for understanding the evolution of skill development systems, it is important to pay special attention to the peculiar role of the state in analysing Japan and Singapore. Relations between the state, business and labour have been a source of debate among social scientists for a long time. We critically review here the Marxist approach to the state and developmental state theory. The tripartite approach to skill development systems, used in this thesis, is discussed at the end of the section.

Marxist approach

Marxist-oriented theorists had been influential in the analysis of the state. Marx and Engels, along with latter theorists such as Miliband, highlighted the capitalist class as the dominant force of influence on the state and conceptualised the state as an instrument of capitalists (Jessop, 1982). Such a deterministic Marxism has been challenged by other (Marxist) theorists who have highlighted the 'relative' autonomy of the state in many capitalist countries (e.g. Poulantzas, 1968, 1976). The extent to which the state is autonomous from other actors or interests in society is always a difficult question. Marxism, or at least its more vulgar form, tends to place too much emphasis on how business controls the state.

There is no doubt that the state in East Asia set out, from the beginning of the industrialisation process, to promote capitalism as it envisioned the construction of capitalism as the most effective and fastest means for achieving national wealth and strength. The state in South Korea, Japan, Singapore and Taiwan found a model of rapid economic growth in the promotion of capitalism. In these East Asian countries, at the early stage of economic development, civil society was often relatively unorganised. Even though civil society existed, if its interests were not in line with

officially endorsed views, it was substantially weakened and forced to comply with the state's views.

The Marxists' capitalist-centred view underestimates the autonomy of the state in East Asia. Although practically all states in the region endorsed and pursued the construction of the capitalist state, such initiative did not come from the capitalists themselves. A majority of the leaders who envisioned and initiated the process of modernisation and industrialisation in Japan in the late 19th century, for example, came from the landless warrior class. In Singapore, the ruling People's Action Party (PAP) chose to keep its autonomy from the existing, largely Chinese, business community rather than relying on it, in pursuing its strategy of rapid economic growth since independence in 1965.² The state in Singapore embarked upon an accelerated economic restructuring in the late 1970s which aimed to attract MNCs with high-valued added, high technology production while driving out MNCs with labour intensive, low-wage based approaches. In my view, the state in this sense, *used* capitalists to achieve the goals the state envisioned. The state –both the executive and bureaucracy– prioritised and pursued economic growth and national competitiveness as the foremost goals of the nation.

While states in East Asia certainly supported capitalism and capitalists' interests, they had varying degrees of autonomy from capitalists' influence. As elaborated in later chapters, although the government worked very closely with the business sector, the activities of the business sector have been guided by instruments formulated by the state and 'market rationality has been constrained by the priorities of industrialisation' (Onis, 1991:115). Thus capitalists were a means through which the state achieved national goals of rapid economic growth, and not the other way around. However, as noted, the extent to which the state manages business is different even within developmental states. In post-war Japan, the degree of state intervention was not as pervasive as in Singapore. Although the government played a critical role in the areas of industrial policy and competitive strategy, it was less involved in the areas of

² There was a relatively developed Chinese business community, however, the community was sidelined shortly after independence, as it was feared that its promotion might ignite ethnic conflict (Tong, 1989).

education and work. There, the skill development system has been influenced more by the interactions between business and labour on the issue of employment practice.

Developmental state

The role of the state in East Asia has been highlighted for its role in guiding the process of industrialisation and rapid economic growth. Such a proactive role has led to these states being called 'developmental states'. The depiction of Japan as a developmental state first appeared in the classic work by Johnson (1982) on MITI activities in 1925-1975. The active role of the state in the process of industrialisation was also a central focus of studies by Wade (1990) on Taiwan, and Amsden (1989) on South Korea. In Taiwan, the process of industrialisation was not solely driven by market forces, according to Wade. The government played a key role in 'governing' the market so as to support the process and economic growth. Singapore is depicted as one of the prototypes of the developmental state with the pervasive influence of the state in leading the socio-economic development and nation-building process in the country (Rodan, 1989; Chua, 1995a; Castells, 2000). These analysts argue that the state exercised considerable influence and power over other societal forces in guiding the course of economic development. They argue that one of the important elements for the 'success' of the developmental state was that the state had considerable autonomy from, if not subordinated, the interests of other societal forces.

In this conception, institutions were used by the state as important building blocks for achieving national objectives. Institutions which are particularly important for rapid economic growth include, for example in the case of Singapore: the state apparatus in bringing foreign direct investment to the country to create jobs and/or steering the development of strategic industries to harness the country's competitiveness; platforms and mechanisms for sorting out different societal interests; and social norms supportive of such state-led economic development. The developmental state model is largely based on the notion that a capable government can mobilise and lead the population to achieve a common higher goal, notably rapid growth of the national economy and a rising standard of living for the population. However, for these higher goals, other societal interests often take second place. What

was common to the East Asian countries was that the economic imperative for achieving rapid economic growth was so strong that it gave a mandate to and legitimised the state in taking a leading role. The situation which gave rise to developmental states in countries like Japan, South Korea, Singapore and Taiwan closely mirrors the situation in post-Napoleonic Prussia, where the state rose to play a similar role (Green, 1999).³ Green explains that the rise of developmental states in East Asia was associated with a wider process of intense and concerted state formation (ibid.:260). State formation has normally occurred as a response to foreign military invasion or threat of invasion; in the aftermath of revolutions and civil wars; and during periods of post-war reconstruction (ibid.:261).

Developmental state theory has been used to account for the evolution of institutions and skill development systems in some East Asian countries. Based on the theory and an analysis of Singapore, Ashton and Sung (1994) propose a new model of skill formation that highlights the proactive role of the state in shaping the skill development system. They argue that the government's future political and economic goals, as opposed to the needs of individual employers, defined skill needs in Singapore (ibid.:5). The state apparatus took the role of ensuring that skill needs were met to achieve those goals. They argue that such a proactive role of the state in establishing the education and training system and work-based skill formation is a departure from the experience of older industrial societies.⁴ The above study by Green (1999:264) also regards the skill formation process as part of developmental state formation, playing both economic and social roles.

³ The early work by Green (1990) does not deal with East Asian countries; however the study highlighted the role of the state in the development of the formal education system as that system was an integral part of nation-building. As for the historical factors which have been associated with such accelerated processes of state formation, he included: the existence of external military threats, or territorial conflicts; the occurrence of major internal transformations resulting either from revolution or a successful struggle for national independence; and, situations where nations have been prompted into state-led programmes of reform to escape from relative economic underdevelopment (ibid.:310). The third factor echoes the situation in developmental states and the theoretical arguments later developed by developmental state theorists.

⁴ In their analysis, Ashton and Sung (1994) categorise Japan as a old industrial society along with the UK and Germany, where skills needs are defined by the needs of individual employers. While such broad categorisation may not be inaccurate, it is problematic in a sense that it is not consistent with the analysis of developmental state theorists who depict Japan as a developmental state. The shaping of the skill development system in Japan is more complex and is not based only on the needs of individual employers (as the present study argues).

However, the extent to which the developmental state guides, or intervenes in, the process of socio-economic development, and the extent to which the state keeps its autonomy from other societal forces was different among East Asian countries. In Japan, despite the active role of MITI, as depicted by Johnson (1982), in areas of industrial, trade and macro economic management policy, the degree to which the state intervened and guided employment and education matters was moderate in Japan, as noted, during the post-war period. The state had a more dominant position in Japan during the Meiji period of the late 19th century. The evolution of the system in post-war Japan exhibits a more complex dynamic of different societal interests, apart from the state, influencing the formation of employment and education-related institutions, which have come to shape the skill development system.

In terms of skill development, while the influence of the state was heavy during the initial period of industrialisation in Japan in the late 19th century, business and labour took over that role, to a large extent, after the Second World War.⁵ While the public education system was centralised, a number of attempts by the state, through Ministry of Education, to bring the education system closer to the needs of the economy were unsuccessful. In addition, while Japan's post-war government pursued policies to achieve rapid industrialisation and economic growth, the state was not a monolithic entity. In Japan, government decision-making was also subject to inter-ministerial and factional politics.⁶

The problem of the developmental state approach to skill development systems is that the same concept is applied to both Japan and Singapore where there were considerable differences in the relationship between the state, business and labour. It is difficult to place the state of Meiji Japan and that of post-war Japan in the same category. In this sense, the theory does not sufficiently account for the evolution of developmental states. Castells (2000:ch. 4) did discuss this evolutionary aspect of the developmental state, including the demise of the developmental state in Japan since the

⁵ As noted, the state did, however, continue to have some influence over industrial structure and competition strategies through control over aspects of investment until the 1990s.

⁶ The influence of party politics was rather more limited in Japan than in most mature democracies. It was virtually a one-party state (Liberal Democratic Party) from 1955.

1990s and the growing influence and power of civil society in South Korea since the late 1980s. However, the focus of his work was not on skill development.

The concept of the developmental state is useful in understanding the general characterisation of economic growth and skills development in East Asia and in contrasting it with that of the Anglo-American or laissez-faire approach. However, it does not encourage intra-regional comparison and broad categorisation is a weakness in understanding differences within East Asia. Ashton *et al.* (1999) is a rare exception as they demonstrated the variations within the region in terms of the role of the states in skill development and economic progress, although their study did not include the case of Japan. A theoretical perspective that focuses on the role of the state also underplays the dynamics of the internal political economy and differences in power relations between the state, business and labour.⁷

Political economy and the negotiated outcome of tripartite relations

The notion of historical compromises between various ideas and political positions in the wider society, as suggested by Streeck (1997a) in the previous chapter, seems to provide a more detailed examination of the role of the state and non-state forces. However, Streeck's view is rooted in an analysis of Germany and thus the application of the approach is problematic for East Asia.

The consolidation of state power relied on its ability to gain the 'active consent and support' of the people in achieving national objectives. This was very much the case for Singapore. Despite the open conflicts observed in the early stage of development mentioned above, the state has vigorously promoted an ideology of national survival –if the nation fails to survive, so too will its citizens– and this has gradually come to form a moral norm of the population⁸. As a result, despite the

⁷ The work by Castells (2000) touched on the changing relation between the state and civil society as noted, but it did not provide a detailed history.

⁸ The proactive role of the state has been evident in education and training in that these states have been instrumental not only in raising the level of skills and knowledge among the population but also in cultivating supporting social values (Ashton *et al.*, 1999; Ashton and Green, 1996; Green, 1999). For example, *Shushin* –moral education provided in pre-war Japan– promoted not only traditional and cultural values but also a strong sense of social responsibility and loyalty to the emperor (and to the nation). This suggests that ideology and hegemony play an important role in social cohesion in a developmental state and provide a source of legitimacy for the state and its actions.

tension which has existed between the state and civil society actors, they were, or are, often in agreement in terms of a broader national-level ideology of economic growth. An example of this phenomenon was observed in Singapore when the National Wage Council announced the reduction of the wage level in all sectors of the economy in 1986 and implemented this without major and open opposition (Chew and Chew, 1998). Developmental states often achieve such an agreement by promising and providing the population with a higher standard of living. This point echoes the argument by Gramsci and Poulantzas that some concessions by the state to fulfil the interests of the general population are important to preserve the capitalist regime (Jessop, 1982). The sustainability of state leadership depends on the ability of the state to achieve the higher goals it promised to deliver. This characteristic is important to differentiate between an authoritarian state and a developmental state, like Singapore.

Elements of developmental state and Marxist perspectives provide useful insights into understanding the development of institutions in East Asia. The two theoretical perspectives differ in terms of their emphasis on the state as an autonomous entity. While the developmental state approach emphasises the state as an autonomous and leading force in the formation of institutions, the (crude) Marxist perspective suggests that institutions are the instruments of business/capitalists. What is required is a more balanced approach, which accounts for the influence of both the state and non-state forces on the formation of institutions. By drawing upon insights provided by above perspectives, I now provide a conceptual framework for understanding the formation of institutions and the broader skill development system.

3.3 A framework for the formation of institutions

Having discussed the peculiar role of the state in East Asia, it is now necessary to deepen the analysis on the formation of and changes in institutions in relation to the interactions of tripartite actors. The following discussion addresses questions such as: what determines power relations and options for actions for each actor?; what prompts changes in institutions and how do the stakeholders interact?; and what determines the outcomes of such interactions?

3.3.1 Five key factors affecting the relations and interactions between the actors

Relative power relations between tripartite actors affect the extent to which each actor can influence the formation of institutions. However, such power relations and options for actions for each actor are formed by various forces. These include: (i) major historical disjuncture; (ii) periodic economic and social challenges; (iii) internal dynamics of each actor; (iv) formal structures for negotiations; and (v) path dependence.

(i) Major historical disjuncture

Major economic, social and political events which mark a disjuncture in the country's history can have considerable influence on the existing power relations. Such a disjuncture can be brought upon by exogenous (international) factors or may result from the particular dynamics of the domestic political economy. Green (1990) argued that the process of state formation (and the establishment of a national education system) was accelerated by historical factors such as: the existence of external military threats or territorial conflicts; the occurrence of major internal transformations resulting either from revolution or a successful struggle for national independence; etc. (ibid.:310). Similarly "the existence of an emergency situation in the society" including economic underdevelopment which poses a threat to national sovereignty can be the main historical basis for what Castells (2000) called 'situational nationalism' which contributed to the rise of developmental states in East Asia. An historical disjuncture can also set common higher objectives for society that are difficult to dispute. Examples of these higher goals include economic survival and rapid economic and income growth (Ashton and Green, 1996). In relation to the present study, an historical disjuncture is considered to be 'major' if it changes the existing power relations between the tripartite actors and impacts on the institutions which support the skill development system.

In the cases of Japan and Singapore, the major historical disjunctures were: defeat in the Second World War and the social and economic restructuring under the

occupation in Japan during 1945-52; and the unexpected independence as a sovereign nation for Singapore in 1965 due to the sudden separation from the Malay Federation. In both countries, the events culminated in the urge for rapid industrialisation and economic growth: for Japan primarily to rebuild the war-torn nation; and for Singapore to survive as a small city-state while fending off the potential military threat to its sovereignty from neighbouring countries.

It is important to recognise, however, that the effect of such major historical disjunctures is different. In Japan, the strength of the state and major business conglomerates were substantially curtailed under the occupation, while labour increased its influence dramatically, which resulted in the unprecedented balance of power between the tripartite actors. After the occupation, the state and big business regained their power to a large extent but labour continued at least until the late 1970s to exert considerable influence on matters related to employment and work. Although the state continued to play an important role in the area of industrial planning and competitive strategy, its role was relatively limited in the area of employment, work and education. The long-term employment practice that evolved from tripartite relations at the time provided the basic condition which facilitated individual and firm investment in skill development at the company level. In Singapore, the crisis situation caused by sudden independence led to the rise of the state and legitimised its actions to overcome the crisis. This established a basic pattern of state-led socio-economic evolution in which skill development was closely linked to the government's economic and social strategies and was thus state-led. Thus, a major historical disjuncture can give rise to one actor becoming stronger, but it can also limit the role of a particular actor.

(ii) Periodic economic and social challenges

Beside a major historical disjuncture, a number of historically specific economic, political or social pressures can also challenge and demand adjustments to the existing institutions. These pressures can condition the relationship between the stakeholders by limiting the options that each actor can pursue. These pressures may include: economic recession; intensified international competition; demand for higher productivity and

technology; labour shortages; changes in national competitive strategy; or the rise of particular social demands (e.g. the expansion of educational opportunity). For example, the economic recession in the mid-1980s in Singapore led the tripartite actors (through the NWC) to make the wage structure more flexible as they saw the existing seniority-based structure as causing wage increases greater than productivity. While the tripartite actors saw the change as necessary, it had an unintended effect on the skill development system. The adoption of the flexible structure enhanced the external characteristics of the labour market and counteracted the effort to reduce high labour turnover, which had been seen as a major bottleneck for firms to investment in training.

The effect of these periodic economic and social challenges will depend partly on the extent to which such pressures pose (or appear to pose) a serious common threat to all actors, thus requiring their unity and collaborative actions. However, the effect of such pressures in terms of adjustments to the existing institutions will be largely mediated by power relations between tripartite actors and the internal dynamics within each group.

(iii) Internal dynamics of each actor

Cohesion within the state is also an important element in determining the level of influence of the state. Divisions within the state, in terms of inter-ministerial conflicts, or internal politics within the executive, can disperse the strength of the state. The extent to which such cohesion can be achieved relates to the ability of the state to gain the 'active consent and support' of the tripartite actors as well as of the general public in achieving national objectives.

Similar to the state, the negotiating power of trade unions relies heavily on the level of support that unions can draw from their members. The level of support reflects the unions' capacity to stay relevant and responsive to meet the needs of members and the capacity of the leaders to prioritise different interests among the members and to work towards a common agenda. A declining membership weakens the negotiating power of the unions in general. Attempts by unions to be responsive to the diverse needs of their members (e.g. older and younger members) can sometimes lead to immobility or inaction as they become caught up in trying to decide how to fulfil these

different or conflicting needs. The ability of unions to form a united front influences their negotiating power while schisms and internal frictions within unions can substantially weaken their power.

Negotiating power is also dependent on the capacity to draw upon wider support from society. A threat to the very basis of unions' existence is another factor which may weaken their negotiating power. Such a basis can include: a threat of collapse of the company where a union exists (in the case of house unions); the relative strength/weakness of the industry which the unions represent (in the case of industry-based unions). The experience of Japan highlights the limitation of house unions in pushing the interests of workers when their companies were threatened with the collapse of the company. The break-up of unions or the loss of leaders (either by coercion or due to internal conflicts) can also have a detrimental impact on the strength of unions, as observed in Singapore.

The nationality of enterprises (i.e. foreign or domestic) can also influence the formation of positive collective action by employers. In particular the large presence of multinational companies (MNCs) in an economy may inhibit the contribution of business to local economic and social development, including skills development, as these companies pursue their own agendas. However, this does not necessarily need to be the case as foreign companies may engage with local companies and play a part in the national economic strategy. If properly guided by the government, for instance, foreign enterprises can play a major role in economic development. This means that, depending on the level of the government's guidance, the market externality of foreign companies can be moderated.

Singapore is a good example of the case in which multinational enterprises have been strategically invited by the government as a main element of its strategy of rapid economic growth. The activities of multinationals have been guided closely by the government pursuing its domestic economic strategy. Major formal structures for negotiations between tripartite actors in Singapore practically always include the representatives of major foreign companies. Once agreements are reached, however, these companies are obliged to respect them in the same way as domestic firms. As Castells (2000:291) notes, "In Singapore, the multinationals quickly understood that the

Lion City could be a tropical paradise for them only on the condition of ‘not messing up’ with the government”. As such, the behaviour of these foreign companies is affected by local institutions and the government’s strategic objectives.

(iv) Formal structures for negotiations

The influence of unions’ interest can be conditioned first by legal regulations about the role and actions of unions, and formal organisational structures through which workers can express their interests and concerns. While formal organisational structures provide an official platform for organised labour to express and negotiate its interests, such structures can also restrict representation of labour’s voice by screening who can, or cannot, participate in the formal organisations (often done in a subtle way). Unless other legitimate avenues for voicing workers’ concerns are available, some segments of labour will not have a channel to voice their concerns and influence the policy making process. When the state had a heavy hand in selecting the unions’ leadership, the autonomy of unions pursuing their members’ interests is reduced. This was witnessed in Singapore in particular during the restructuring of the unions from the 1960s to the mid-1980s.

(v) Path dependence

Social agreements which are reached after lengthy negotiations, conflicts and bitter compromises can have a lasting impact. They can result in the creation of institutions, both formal and informal, that guide the future course of development, provide an element of stability and consensus and are resistant to sudden change. A system can exhibit an element of *path dependence* in which its development is guided by initial events.⁹ Changing paths is difficult because it requires agreement by various actors and the reformulation of formal structures and ways of thinking and acting. In essence, it means un-doing and re-doing the social agreement. This is not to say that institutions will not change. As Pierson (2000:265) argues, “asserting that the social landscape can

⁹ The concept of path dependence became prominent in the social sciences in the 1990s, notably within economics (see, Liebowitz and Margolis, 1998). It is often associated with institutional analysis (North, 1990). Application of the concept to political science has been developed by Krasner (1988) and Pierson (2000).

be permanently frozen is hardly credible, and that is not the claim” made by theorists of path dependence. The path may change due to a variety of factors, including a major historical disjuncture and also by an accumulation of periodic social and economic challenges, as discussed. In seeking to understand the evolution of a system, it is important to recognise, therefore, that there are new factors that will generate change but that there are also existing institutions that will limit change and determine what path a system will continue to follow.

In Japan, the introduction of new technology and the demand for higher productivity in the 1960s resulted in the modification of the existing long-term employment practice. However, the basic framework of social agreement on long-term employment practice, which was achieved after more than a decade of informal and formal negotiations following the war, conditioned how firms responded to those technological and productivity challenges. Thus, the basic condition for the company-centred skill development system remained. The government of Singapore tightened its grip on political opposition and labour movements, in particular at the early stage of independence, as it saw social stability as vital for its MNC-centred growth strategy, in return it ensured employment and economic prosperity for the population. The basic framework of this *de facto* social agreement seems to be continuously valid to date. The skill development system continues to be characterised as state-led.

Relationship between historical disjuncture and path dependence

By suggesting that the skill development system is shaped by both major historical disjunctures –as a force for *change*– and path dependency –as a force for *continuity*–, we require further discussion as to how ‘major’ these disjunctures have to be if they are to ‘break’ the path dependence, and what other circumstances will break such dependence.

For an historical disjuncture to qualify as ‘major’ it must cause the substantial transformation of the existing structure of interests and its underlying power relations. In this regard, the existence of military and/or economic threats to national sovereignty and actual foreign occupation, as noted above, qualify as major historical junctures. They tend to transform the existing power relations and affect the relative power of the

dominant interests in society. Land reform in South Korea and Taiwan in the 1950s, for instance, substantially curtailed the power of the landowner class (Castells, 2000:280). A threat to national sovereignty which causes a state of emergency may prompt the setting of 'higher goals' in society that results in other societal objectives taking second place (Ashton and Green, 1996). The situation allows for the emergence of a strong leader, or apparatus, that pursues such goals and legitimises its action at the expense of other immediate societal interests (e.g. such as that of labour). Defeat in war and subsequent occupation can bring new stakeholders into the existing structure of interests and the underlying power relations in society. In the presence of a new and dominant stakeholder, the interests that support the status quo will be weakened and the path dependence is likely to break.

The analysis of the two cases (Japan and Singapore) highlights at least one other situation in which path dependency can be broken. This is associated with the decline of those stakeholders' interests that provided the basis for the creation and maintenance of certain institutions. Such a change in interests is more evolutionary and gradual, rather than a major break, and is associated with long-term social change. In the case of Japan, support for job security and access to equal, standardised education which provided the fundamental basis for the practice of long-term employment and the egalitarian approach to formal education is now changing, as the rise of interests seeking a better quality of life and individuality forms the basis for new institutions. On the contrary, Singapore presents the case in which the old 'higher goals' which submerged other societal interests in the past still remain valid. While the achievement of creating an affluent nation led to changes in societal interests to some extent, the existence of and the need to achieve 'higher goals' continue to provide the legitimacy and support for the underlying power relations and thus for continuity in the existing institutions.

Gradual social change partly relates to the degree to which each developmental state achieves its objectives of economic prosperity. Castells (2000) argues that as the initial objective of the developmental state is fulfilled, the state begins to lose the basis

for its legitimacy, leadership and social control.¹⁰ Since such higher objectives were a source of social cohesion and of the concerted efforts of society, it creates room for various interests in society which had been put aside for a long time. The level of education among the population increases its capacity to question and challenge government actions. In terms of companies, contrary to the early stage of development, where many companies had limited financial capacity and influence, they begin to take initiatives in their business strategies with greater involvement in labour and skills matters. The growth of influence by business in Japan, relative to that of the labour, from the 1970s onward is a notable example. In the case of the state-led system in Singapore, if non-state forces substantially grow, the construction of institutions is likely to be more influenced by the interests of non-state forces, rather than the state.

3.3.2 Contribution of the conceptual framework

There may be a temptation to pinpoint one or two factors as an explanation(s) for different skill development systems. However, the strength of the framework, consisting of five factors, is that it accounts for multiple factors that influence the shaping of the skill development system, while at the same time it indicates that the impact of such factors is mediated through the specific national political economy situations. Thus, the framework highlights the importance of the mediating role of the internal political economy in understanding the formulation of institutions and the overall skill development system. The framework does not predict the outcome (i.e. which specific type of skill development system will result) of the interactions between the five factors that influence the interests and power relations among stakeholders. It highlights the point, however, that each skill development system is a historical construct of the interests, interactions and underlying power relations among the stakeholders, rather than the result of the direct effect of one or two economic, historical or political factors.

¹⁰ Castells (2000) gives the example of South Korea in demonstrating the decline of the developmental state and the growth of civil society.

3.3.3 Nature of interactions: what prompts changes in institutions; how actors negotiate?

While a major historical disjuncture can provide the basic condition for defining power relations between the stakeholders, a number of historically specific events, or pressures, can prompt interactions between the stakeholders which lead to some adjustments to their power relations and institutional development. As described above, these historically specific pressures include: economic recessions, demands for labour productivity, the advancement of technology and particular social demands. Since each pressure concerns all of the actors, and often demands common action, it prompts the process of negotiation, compromise and agreement (or some sort of settlement) as the actors have different views and interests in terms of how to respond to such pressures.

The form of negotiation can take various forms. It may involve a formalised structure in which representatives of various social groups come together and literally negotiate at the same table by contesting their interests and seeking a compromise or agreement. In Japan, the experiences of a number of companies show that such negotiations took place as a form of formal or informal consultations between management and labour. Such consultations were prompted, for example, by pressures to introduce new technology and mechanise some parts of the production process in the 1960s. The outcome of the negotiations led to the consolidation of long-term employment practices in Japan. In Singapore, the economic recession in the mid-1980s prompted a review of the existing, predominantly seniority-based, wage structure.¹¹ The interests of tripartite actors were expressed through consultations within the tripartite National Wage Council and the outcome reformed the wage structure to be a

¹¹ The channel for labour to voice its concerns was restricted by the legal arrangements and formal organisational structures of the unions. While the law regulated what items the labour unions were allowed to negotiate, labour voices were represented predominantly through the pro-government labour union (National Trade Union Congress). Many of the key official agencies in Singapore were in fact tripartite bodies which provided official forums for negotiation. Although it needs to be noted that when these bodies were established by the state and their leadership tended to be pro-government, the outcome of negotiations tended to be supportive of the state's position. The tight control of labour was largely prompted by the severe economic and political situation in the early years following independence.

flexible and merit/performance based structure. This increased the importance of pre-employment qualifications, and thus the role of the formal education and training system in the overall skill development system.

Negotiations between tripartite actors are not always constituted as a formalised, explicit process and an absence of formalised negotiation does not mean an absence of negotiation. It can take the form of expressions of public opinion, protest and boycott, for example. When the state's policies are in conflict with the interests of certain actors in society, these non-state actors may resist the state's initiative by not actively supporting it (non-compliance), if not by a more explicit form of protest. A similar situation can take place at the company level between management and labour. When the state faces this type of resistance and is compelled *de facto* to reverse such policies or substantially revise them, the event indicates the relative strength, or negotiating power, of non-state forces. On the other hand, if the state manages to pursue its interests and implement its policies despite such resistance, we could say that the state has overriding power over non-state forces.

3.3.4 Outcomes of interactions: an empirical thesis statement on Japan and Singapore

It is difficult to sum up in a short thesis statement the differences in the evolution of the skill development systems in Singapore and Japan. Nonetheless, the full application of the five-point framework, provided in the following chapters, allows us to characterise the evolution of the two systems in the following manner.

The skill development system in Japan evolved partly as an outcome of post-war industrial negotiations under a relative balance of power among the tripartite actors which was achieved during the aftermath of the defeat of the war and the occupation. The negotiation resulted in social agreements on key institutions that created the basic framework for the subsequent development of the skill system. The institutions included the long-term employment system, the hybrid seniority and performance-based wage system and the increased autonomy of the education system from the interest of business and the national economy. While it was not intentional, these

agreements facilitated employers to respond to new skill demands by training existing workers, thus laying the basis for the enterprise-centred skill development system. From the mid-1960s onward, these social agreements were increasingly challenged; however they continued to provide the basic guiding framework for the behaviour of employers, workers and to some extent the government, despite the advancement of technology and various economic challenges and disruptions. Into the 1990s, however, the shaping of the institutions was not an outcome of the negotiations between *conflicting* interests. Instead, as each stakeholder attempted to address its own challenges, interests converged, in a sense that they all accepted the need to modify the existing system. The change in the interests was associated with long-term social change and changes in values. This convergence of interests provided a platform for reforming further the employment and management systems, and the overall skill development system.

The evolution of the skill development system in Singapore similarly reflected the contestation of the different interests of stakeholders, in particular until the late 1970s. However, unlike Japan, economic and political crises in the first 15 years of independence fuelled the rise of the state while putting other societal forces under its control, or even transforming them to support the state. Power relations between the tripartite actors, conditioned by the crisis, set the basic context for the development of institutions which constituted the skill system. These included flexible employment practices, a flexible and largely merit-based wage structure (from the mid-1980s), an externally oriented labour market, and a formal education system closely linked to national economic strategies. As a result, the skill development system has come to be state-led, centring on pre-employment formal education and training institutions, which are closely linked to the nation's political and economic needs, albeit within the context of a flexible external market. A succession of economic challenges since the 1980s in fact solidified the basic framework of the political settlement (state-led consensual tripartism), which was largely established by the late 1970s. While there has been much concern for the pervasiveness of the state's dominance in economic and social development, the periodic economic challenges have perpetuated the crisis-like situation, and that has legitimated the state until now. The skill development system

continues to be shaped by the government's economic strategies, now even with the support of social partners that were transformed to be active supporters.

Conclusion

The chapter conceptualised the skill development system as a complex set of institutions which guide individual and firm behaviour towards skill development. It highlighted that the skill development system is formed not only by education and training organisations, but also by a broader employment-related institutions such as employment practises, the wage structure and regulations. To understand the evolution of the skill development system, it is important to examine the nature of both the education and employment institutions. The distinction between skill development systems demonstrates the cumulative effect of the institutions.

While many of the institutional approaches to skill development focus on how different institutions affect training behaviour, this study asks how such institutions are established and how they change. For this, the chapter developed a basic conceptual framework and proposed five key factors affecting the formation of institutions. Those factors were namely: major historical disjuncture; periodic economic and social challenges; internal dynamics of each tripartite actor; formal structures for negotiations; and path dependence. The chapter argued that while the skill development system is partly shaped by changing skill demands stemming from economic, political and technological challenges, it is also shaped by how the stakeholders responded to those challenges by forming or changing those institutions that comprise the skill development system. While a major historical disjuncture can condition power relations in society and lay a basic path for institutional development, such institutions are also shaped by negotiations, compromises and agreements between the actors (with different interests) in responding to more specific challenges. The chapter also noted that institutions can have a lasting effect once they have been established, particularly if their formation was a result of lengthy and bitter conflicts and compromises. However, a drastic change to the system is still possible as a result of a fundamental change in the

relationship between stakeholders, either as a result of a major historical disjuncture or more gradual and long-term social change.

The study now applies the conceptual framework developed in the chapter to understand the evolution of the skill development systems in Japan and Singapore.

Chapter 4 Long-term employment, skills and a new balance in tripartite relations (1945-1960s)

The defeat in the war and the subsequent occupation undoubtedly marked an historical disjuncture in the social and economic development of Japan. The occupation regime initiated or allowed unprecedented social and economic reforms which were not possible without its presence. This included the replacement of the military regime with a civilian government and the purge of those who promoted and collaborated with the former regime. The purge was carried out not only in the political arena, but also in the fields of business and education. The *Zaibatsu* (financial cliques), which had supported the former regime financially, were disbanded and new legislation prevented monopolies and the concentration of economic power so as to curtail the power of large businesses. As well, labour laws, notably the Labour Standards Law (1947) and the Labour Union Law (1949), were enacted for the first time in Japanese history. While the voice and power of the traditional and conservative state were restrained, the occupation regime created room for alternative, or progressive, forces to advance. Unions came to play a major role in the social construction of post-war Japan particularly during the first 15 years. Thus, the occupation and its reforms had a major impact on the balance of power among the state, employers and labour in post-war Japan.

This change in the balance of power set the scene for the shaping of those institutions which were crucial for the evolution of the skill development system. The ideas and interests of non-state actors, as opposed to those of the state, had a considerable influence on the formation of institutions. These institutions were: long-term employment, the wage system that emphasised seniority and long-service, and the egalitarian education system. The first two laid down the basic conditions for the

company-centred skill development system, while the education system maintained a certain distance from the specific needs of industry.¹

In the new post-war context, the fate of these institutions was subjected to negotiation among stakeholders with different ideas and interests. The chapter argues that the relatively equal balance of power among the government, employers and workers, achieved during the occupation, led to the construction of the above institutions which comprised the skill development system. These institutions reflected, to a more significant degree, the interests of non-state forces than had been the case in the pre-war era. 'Long-term employment', as a general pattern of employment, emerged as a result of almost two decades of labour conflict and negotiations over employment security. It, along with company-centred skill development, was practised by a small number of large companies even in the pre-war era. However, once long-term employment became firmly established, it not only consolidated existing practices but also encouraged other (mainly large) companies² to gain the benefits of adopting a system of company-centred skill development.

The arguments presented above are pursued through an analysis of the evolution of institutions and the skill development system with a particular focus on the ideas and interests contested during the process of evolution. The main organisations representing the tripartite actors during this period included: Nikkeiren for employers; Sohyo, Nikkyoso and other trade union organisations for labour and the Ministry of Labour and the Ministry of Education, Science Sport and Culture (or Monbusho) for the government. The chapter begins with an analysis of long-term employment. It then examines the processes by which the wage structure and the formal education system were reshaped.

¹ The formal education system, however, did later embody the ideology of meritocracy which increased competition for graduates and provided skilled workers for the economy.

² It should be noted, however, that although turnover figures correlate with the size of firms, the ideal of life-time (long-term) employment is held for all sizes of firms and small firms do have systems of seniority wage progression and they promote long-term employees (Dore and Sako, 1998:130). Smaller firms are, however, more susceptible to external and business pressures that make it difficult to uphold the ideal. While acknowledging disparities in terms of wages, labour costs and work conditions between large and small firms, Whittaker (1997) also notes that many small firm owners have a strong sense of responsibility towards their employees. He writes: "Asked why they did not sell up during the 'bubble' years, or, conversely, during the trough of recession, owners cited responsibility to employees and their families: 'I have twenty employees. That means eighty mouths depending on me'." (ibid.,:153).

4.1 Employment, labour market and industrial relations

4.1.1 Enhancement of long-term employment

Long-term employment has been highlighted as one of the most important institutional mechanisms underpinning the evolution of the skills system in Japan and its effect have been well documented (Koike, 1997; Dore and Sako, 1998; McCormick, 1991; Whittaker, 1997; Green, 2001). It has provided the basis for a long-term relationship between employers and employees in which job security is provided by employers in exchange for the long service and commitment of employees. This facilitates employees' willingness to learn company-specific skills that are less valued outside of the company (Dore and Sako, 1998). For employers, the system justifies a substantial investment in training because they do not need to worry that employees will leave the company after training. Employees are also more willing to accept a type of work organisation which involves loose adherence to job descriptions and substantial rotation across a range of jobs, because occupational specialism matters less within the structure of the internal labour market (Streeck, 1996; Dore and Sako, 1998). This type of work organisation require new or more learning on the part of employees, largely in the form of unstructured learning-by-doing (Streeck, 1996). Employees identify with the company, are willing to learn and engage in work improvements by applying the learning accumulated within the company over the years (Dore and Sako, 1998).

Although a type of long-term employment existed in the 1920s, its establishment as a general practice occurred only during the post-war period. Referring to high job separation ratios in the 1930s in several large companies (e.g. ship-building and steel), Koike (1997) argues that long-term employment as a condition conducive to company-based skill development was established only in the late 1950s and early 1960s. According to data from the oldest ship-building company in Japan (Mitsubishi Nagasaki Zosenjo), the separation rate averaged 27% in the period 1918-38, but fell to 16% in 1951-60 (Koike, 1997:150)³. Despite large-scale labour conflicts in the 1920s,

³ Koike (1997:148) suggests that the separation rate which facilitates the development of skilled workers is about 20% for those workers in their mid-20s (or younger) and 6-7% for those in their 30s and 40s.

which pushed some companies to adopt long-term employment, massive job losses occurred during the world recession of the 1930s and again during economic reconstruction immediately after the war. Thus, long-term employment was not yet established nor widely diffused in the early part of the post-war era.

The pre-war practice of long-term employment was limited to Zaibatsu-related large companies, and even within them, applied only to well-educated, predominantly white-collar workers and a limited number of skilled workers (Nimura, 1994:50). The establishment of long-term employment as “the (social) norm, as something closer to the right for regular full-time employees” took place from the early 1960s (*ibid.*). It would be sensible to view the practice as a general pattern that became established only as a response to social forces and situational peculiarities unique to the post-war period.

Rise of labour

One of the major factors contributing to long-term employment was the unprecedented rise of unionism following the occupation. The passing of the Trade Union Law, the Labour Relations Adjustment Law and the Labour Standards Law immediately following the occupation entitled Japanese workers to decent working conditions and gave them the right to organise for labour negotiation, which had been a goal of Japanese workers since the 1920s (Urabe and Ohmura, 1983:62). On the other hand, employers were at a loss and Zaibatsu were disbanded. Several laws were passed to prohibit monopolies and the concentration of economic power. The influence of the government (in particular its conservative elements) was severely restrained under the occupation, while war criminals and collaborators were purged and persecuted.

As the occupation force attempted to ‘democratise’ Japan, it gave strong support to the unions as they were regarded as a major, if not the only, serious force which could counteract the conservative forces in society. As a result, unionism spread deep into individual companies, although the occupation force’s support for unionism soon declined and restrictions on businesses were reduced in the face of the spread of communism. A number of radical labour union movements (largely in-house) were reported around this time (Inumaru, Tsujioka and Hirano, 1989). When employers rejected union demands, some of these unions temporarily took control of the

production process until their demands were accepted (Urabe and Ohmura, 1983:68). In fact, labour conflict in the early post-war period largely took the form of takeovers of production management by labour, instead of strikes. In 1946, the number of takeovers surged to 404 and involved the participation of 237,000 workers (Kamiyo, 1995: 208-209). Some of these labour conflicts turned violent including one incidence in which over a thousand unionists stormed the main office of the company and forced the president, on the roof-top of the building, to agree to a wage increase (ibid.). The strength of the unions was such that some of them literally demanded 'co-management' of companies by demanding the right of hiring and firing and the disclosure of the financial details (Urabe and Ohmura, 1983).

Unionisation spread rapidly throughout the country. The number of workers organised into labour unions increased as follows (Koshiro, 2000:9):

in	1945	380,000
January	1946	900,000
February	1946	1,540,000
April	1946	3,020,000
December	1946	4,890,000

The membership rate reached its highest level (55.8%) in 1949. The majority of unions created at this time was enterprise (or branch of the enterprise) –based ones which were initiated by employees. As the study will discuss later, this enterprise-based unionism became a main basis for labour negotiation in Japan, exerting considerable influence over matters concerning personnel and working conditions. On the other hand, the weakness of the enterprise-based structure became apparent later, particularly from the early 1980s. Many of the unions later became ineffective in guarding the interests of their members when the survival of their companies was at stake. While this development will be discussed in more depth in the following chapters, it is important here to analyze the factors contributing to the evolution of this enterprise-based unionism.

Rapid unionisation was, first of all, linked to the extreme poverty and low level of living conditions that the devastation of the war imposed on all workers. Unionisation provided a natural solution as it was a means of negotiating better wages for these workers (Aizawa, 1998; Hyodo, 1997a; Koike, 1997; Tokita, 2003). This

partly explains why workers in the same office or enterprise tended to organise themselves into unions. The unique aspect of this unionisation was that the majority of unions included both blue-collar and white-collar workers, with the white-collar workers often taking a leadership role in setting up the union. While the labour movement in pre-war Japan had been concerned only with the welfare of blue-collar workers and there had been a clear hierarchical distinction between the two groups of workers, these relations changed in the aftermath of the war. All employees, regardless of their status, were equally suffering from poverty and this made them unite (Aizawa, 1998). Secondly, unionisation also reflected democratisation in the workplace, eliminating the separation between blue-collar and white-collar workers which had existed in pre-war Japan. The movement echoed the overall democratisation of Japan that was initiated by the occupation force and supported by the general public (with exception of conservative elements and large businesses). Thirdly, the rapid development of enterprise-based unions was also fuelled by the attempts of some employers, who realised that unionisation was an irreversible trend, to set up house unions with their sympathisers before the employees could organise themselves (Hyodo, 1997a; Tokita, 2003; Aizawa, 1998). In order to counteract this movement, the unionisation by workers needed to be swift and enterprise-based. The fourth factor was that, historically, Japan had little experience of workers organising themselves along the line of their trades unlike some European countries (Hyodo, 1997a:44). The labour movement in pre-war Japan did not have any legal standing, while communist and leftist organisations had been banned under the military regimes. When workers were grouped, it tended to be based on the enterprise. This was typically the case in large companies.

Fifthly, the anti-communist stance taken by the occupation force (and the ruling government) in the late 1940s was another factor that consolidated the enterprise-based union structure. The occupation led to the release of political prisoners including communists and leftist union leaders. The strong support for unionism by the occupation force allowed these pre-war unionists to seize opportunities to form national unions. Although unionisation was largely based at the enterprise level, there were three layers in the union structure. Each enterprise-based union became a member of

an industry-based (or local) union which became a member of one of two main national unions: the communist-influenced 'Sanbetsu-kaigi' and another more moderate union that was closer to business called, 'Soudoumei'. The strong and confrontational stance taken by Sanbetsu-kaigi was more popular among workers as it appeared to provide a better chance of winning concessions for workers. For Sanbetsu-kaigi, rapid unionisation based at the enterprise level was supposed to be the basis for creating true industry-based (cross-enterprise) unions under its leadership (Tokita, 2003). However, this transformation was never achieved as the occupation force and the government were determined to curtail the communist influence. The communist People's Republic of China had just been established and the era was rapidly moving towards the Cold War. The US could not allow communism to develop in Japan under its occupation (e.g. Aizawa, 1998; Tokita, 2003).

In fact, Sanbetsu-kaigi was making progress toward creating an industry-based union structure. The union was a major force, along with other civil society groups, in backing opposition parties in the general election of 1946 that led to the defeat of the conservative government. That government had attempted to preserve the emperor-based regime and was sympathetic to big business. In September, the national railway union and the seafarers unions (both members of Sanbetsu-kaigi) organised a national strike and successfully prevented the attempt by companies to layoff 127,000 railway workers and 40,000 seafarers. Sanbetsu-kaigi also led another major labour struggle in October, involving 560,000 workers (of which 320,000 participated in the strike) of eight industry unions with significant success over pay rises, personnel matters and the liberalisation of union activities. However, the major advancement of the communist-influenced Sanbetsu-kaigi was a threat to the occupation force.

The turning point was the cancellation by the occupation force of a general strike, planned for the 1st of February 1947. The main issue of the strike was wages for public sector workers, but Sanbetsu-kaigi made it clear that the strike was also politically motivated and designed to defeat the ruling conservative government so as to establish a democratic regime. The occupation force was adamant not to allow 'the usage of such a detrimental social weapon given the impoverished and weak state of Japan' (Tokita, 2003:82).

In February 1948, the occupation force ordered the government to implement the economic and budget plan ('Nine Principles for Economic Stability'). The plan required the government to tighten monetary policy and to carry out a major economic restructuring that involved the closure of 9,000 companies and branches and the layoff of 420,000 people (Inumaru, Tsujioka and Hirano, 1989:117). The issue of unemployment naturally became the highest concern among workers at the time and was reflected in the number of such cases brought to the unions. Demands against the closure of companies, the shortening of working hours, lay-offs, and the regaining of jobs accounted for 414 cases or 22.7% of all cases brought to the unions. This was higher than the number of demands for wage increases (Urabe and Ohmura, 1983:89).

The serious attempts by the occupation force and the government to restrain this militant unionism followed. While some in-house unions (e.g. Kobe Steel) managed to obtain 'a principle of no lay-offs' (ibid.), large-scale redundancies, backed by the occupation force and the government, took place during the 1940s-50s. In 1948, the occupation force ordered seven industry unions to stop their strikes. In 1949, many labour strikes and demonstrations were suppressed by riot police and some ended in bloodshed. In the same year, two Sanbetsu member unions faced the threat of massive lay-offs (95,000 for the national railway, 4,600 for Toshiba). The unions planned a major strike against the proposed layoffs, but in both cases the unions ended up calling off the strikes due to unexpected events. For the national railway, the day after the 37,000 names of the lay-off list were announced, the president of the national railway was found dead. Union leaders and members of the Japan Communist Party were blamed.⁴ The event was followed ten days later by a train accident killing six people, which Prime Minister Yoshida said was instigated by the communists. For Toshiba, similarly, a railway accident took place near the Toshiba Matsukawa factory, killing three people. The event was followed by the arrest of 10 national railway trade unionists and 10 Toshiba trade unionists, who were mostly communists⁵. This event also prevented the union from implementing a strike. In the end, the companies went ahead with the lay-offs which included communists, leftists and union leaders (Tokita,

⁴ However, the truth of the incident has never been revealed.

⁵ All of them were acquitted in 1963.

2003:136). The event culminated in the red purge of 1949 which spread from the government and the public sector to the private sector and affected 40,000 people (ibid.:145). As the majority of these people were communists, communist sympathisers, union leaders or activists, the influence of the communists and union activists were substantially curtailed. The membership of Sanbetsu-kaigi declined as follows (ibid.:157):

In	1948	1,400,000
November	1949	770,000
March	1950	320,000
December	1951	41,000
February	1958	0 (union dissolved)

A new national union (Sohyo) was created in 1950 with the support of the occupation force which combined the moderate, mainly large business, unions and a part of the employer-leaning union 'Soudoumei'. Contrary to expectations, Sohyo grew to be a substantive confrontational force in leading the union movement in the 1960s. However, the red purge of major union leaders contributed to the development of the enterprise-based unions which took a more collaborative stance towards the management and employers.

Labour conflict over the issue of employment security continued. The prolonged struggle for employment security climaxed with a major conflict in the mining industry in the late 1950s centred on the Mitsui-Miike mine (e.g. Kamiyo, 1995; Hyodo, 1997a; Tokita, 2003; Hiranuma, 1998). The Mitsui mining union, in fact, had previously led a successful labour dispute in 1953, in which it resisted the company's attempt to lay off, by naming⁶, nearly 2,000 workers (Tokita, 2003:217-220). By the late 1950s, however, the mining industry was in decline in the face of an energy revolution which shifted reliance from coal to oil. Mining companies responded by rationalizing their operations, which involved a large number of lay-offs. One particular mine, Mitsui-Miike, was the focus of such a lay-off, largely due to the presence of a militant union. After a call for voluntary lay-offs resulted in an insufficient number of redundancies, the employer proposed to lay-off 1,278 workers

⁶ 'Naming' is a process in which the company specifies the workers who will be laid off, instead of allowing for voluntary layoffs or agreement with the unions. It was considered bad practice as it allowed the company to exercise its discretion and thus remove undesirable workers.

by naming, including 300 union activists (Hyodo, 1997a:222). The employer took a hard line, as it recognised that the result of this labour dispute would be decisive in setting the trend for not only subsequent lay-offs in the industry but also for curtailing the growth of the labour movement in general (Tokita, 2003:342). It was the largest labour conflict in Japanese labour history and was carefully watched by the whole country. The labour conflict lasted 20 months, involving 370,000 workers and drew donations totalling approximately 2 billion yen from sympathizers and other unions within the country and abroad.⁷ In the end, however, the conflict resulted in the defeat of the labour union with the lay-off of 1,278 workers by naming.⁸

This labour conflict effectively marked the end of labour's confrontational approach and had a significant long-term effect on subsequent union-employer relations. While the conflict resulted in the defeat of militant unionism, the bitterness of the long conflict was ingrained in the minds of both employers and workers throughout the country. By the 1960s, when manufacturers began to 'scrap and build' factories in new locations as they attempted to prepare themselves for rapid growth, many companies opted to relocate all workers rather than lay them off (Hyodo, 1997b:172). Hyodo, a prominent historian of Japanese labour relations, states that the move was partly influenced by 'a lesson from history' that massive lay-offs would lead to major labour conflict and even if conflict was overcome it would leave a scar on employee-employer relations (ibid.; also Hiranuma, 1998:96). When faced with the choice between relocation and lay-offs, unions tended to accept the former in return for long-term employment. The struggle for employment security culminated to the enactment of highly significant legislation on employment in 1966 (*Koyo-taisaku-ho*). The law laid out for the first time the government's responsibility and commitment to achieving 'employment for all' (Sumiya and Koga, 1978:244). Subsequently, the

⁷ Tokita (2003:343) has calculated that 2 billion yen would be equal to 10.6 billion yen in today's currency, which is equal to about US\$89 million (or US\$241 per worker).

⁸ Many factors contributed to this result, including: disagreements within the union and the gradual isolation of the militant faction of the union; the creation of a more moderate union (partly instigated by the employer); and, some tactical mistakes by the union leadership (such as a failure to set strategies in full recognition of the financial condition of the company) (Tokita, 2003:342-343; Hyodo, 1997:221-228). It also should be noted that this labour conflict took place in parallel with the political struggle against the revision of the 'Japan-US Security Treaty', which many Japanese unions regarded partly as an attempt to consolidate the power of capital with the support of the United States. The Mitsui-Miike conflict was seen as a struggle against the growth of capital's influence in the economic arena.

existing Vocational Training Law⁹ (*Shokugyo-Kuren-ho*) was revised in 1969 as a major pillar supporting this initiative. Long-term employment thus gradually gained ground as a result of prolonged labour struggles. This created a historical path for subsequent tripartite relations and institutional development regarding employment and skills development in the workplace.

Government's vision on modernising labour

As long-term employment gradually gained the status of a general practice, the government was developing a different vision for the management of workers. In 1960, the government announced a national economic plan aimed at doubling national income within 10 years. The recommendation presented by the Special Economic Committee (SEC), or *Keizaishin*, in 1963 detailed the plan and urged the 'modernisation' of Japanese labour management to meet the new demands of the economy (Keizaishin, 1963). In its simplest form, this modernisation meant a shift away from the practice of long-term employment and from a wage structure that placed considerable weight on the age, or long-service, of workers. It aimed to create a horizontal (external) and fluid labour market structure. Under the latter, workers would increase their wages by moving up a career ladder within an occupation by gaining further qualifications. This horizontal labour market would be based on a wage structure determined by occupation and job categories. The theoretical basis for the proposal was the idea of 'meritocracy'. The recommendation argued that workers should be rewarded by merit (such as qualifications or specific skills requirements standardised for specific occupations and rank), rather than age. The government wanted to re-organise labour in a way more similar to the American model in which workers were organised along occupation lines. The Committee stressed that the current labour market situation no longer met the needs of the economy and the US model was seen as a better means for achieving rapid economic growth.

However, this recommendation was never implemented in the way it was intended. By the late 1960s, it was clear that long-term employment was becoming more embedded, not abandoned, and with it that the internal labour market was being

⁹ The name of the law was changed to the Human Resource Development Promotion Law in 1985.

strengthened. The recommendation called for the greater role of public training institutions for the skill development of workers but, instead, in-house training increased substantially during this period (Nikkeiren, 1965, 1971). The fluidity of labour was not pursued while the practice of long-term employment was consolidated (Inui, 1990). Initially the recommendation had the support of the Japanese Federation of Employers' Associations (hereafter: Nikkeiren¹⁰). In fact several large companies (e.g. Nippon Denki) did opt to re-structure their wage systems so that wages were pegged to jobs (occupation and rank within it) (Inui, 1990). Nikkeiren gradually changed its position, however, and came to propose its own version of the proposal (Nikkeiren, 1969). The process in which the Nikkeiren came to propose its own version suggests that the government proposal was considered, in the end, as not suitable for meeting employers' interests (Ishida, 1990). Although the details of this change will be dealt with in the following section, the process suggests that the legacy of the strong labour movement and existing institutions, as well as the immediate economic and business concerns of the 1960s, prompted employers (Nikkeiren) to turn away from the government proposal.

Besides the significant impact of unionism on the enhancement of the long-term employment, economic changes in the 1960s created a supportive environment for the practice. Economic recovery and growth began to accelerate and the growth of business increased the demand for labour. As a result, the benefits derived from long-term employment began outweighing its cost. In fact, labour shortages became a serious concern for employers and were an important factor which promoted the enhancement of the practice (Inui, 1990). The shortage of technical workers more than doubled between 1960 and 1965, from 811,000 to 1,797,000¹¹ (NSKK, 1971:385). Surveys on labour management by Nikkeiren, the employers' federation, show that between 1958 and 1968 companies increased the weight of long-service and experience within the company when determining wage levels (Nikkeiren 1965, 1971). The survey also indicated that the proportion of workers who moved from other companies declined dramatically and that the recruitment of fresh graduates gradually became the norm.

¹⁰ Nikkeiren and Keidanren (Japan Federation of Economic Organizations) merged to form the Japan Business Federation in May, 2002.

¹¹ Total for all sectors.

The wages of workers with similar educational backgrounds were differentiated between those who entered the company as fresh graduates and those who did not. The wage level was set lower for the latter (Inui, 1990:98). As long-term employment gradually gained the status of a common practice (as a result of the labour movement), the issue of labour shortages probably presented companies with a practical problem that pushed them to decide in favour of enhancing the practice.

Another factor was the growing need for new technology and skills from the early 1960s. As a country trying to catch up with industrialisation in the West (i.e. US), Japan relied heavily on existing technology and products to achieve rapid economic growth. As discussed by Amsden (1989) in her analysis of South Korea, 'late' industrialisation places a high premium on workers' learning capacity in absorbing existing technologies quickly and thus allowing the country to compete internationally by modifying technology or existing products. Likewise, Japan's economic leap in the 1960s was largely supported by this competitive strategy. From the early 1970s onward, however, many companies were required to make their own technological advancements and product developments as they moved to advanced and new areas of industry (Tsunekawa, 1996:173). In advanced industries, such as micro-electronics, biotechnology and alternative energy, no blueprints were available.

The need to develop greater scientific, technological and creative capacity among the workforce was in fact expressed by industry as early as the late 1950s. Between the late 1950s and the early 1960s it put forward a number of proposals calling for the development of more scientists, technicians and engineers (KKKJ, 1989). However, as discussed below, the response from the education sector was slow, to say the least, due largely to a serious conflict between the Ministry of Education (Monbusho) and the teachers' unions (notably Nikkyoso). These specific circumstances encouraged companies to engage in the skill development of their employees. This had important implications for the practice of long-term employment, as the longer employees stayed in the company, the greater return the company gained from investing in their training. Thus, the issue of skills was another factor motivating companies to enhance long-term employment.

The training of workers by companies and the retention of skilled workers is often cited as an explanation for the rise of the long-term employment system (e.g. Urabe and Ohmura, 1983). However, it is important to recall that the rationale which regards long-term employment as a condition for the development of skilled workers emerged only from the late 1950s. Koike (1997) has pointed out that, until the 1960s, this does not seem to have been a major factor, given a high job separation rate and the frequency and scale of the lay-offs that took place. In fact, he has argued that the establishment of institutions necessary for the development of skilled workers (including long-term employment and an age-based wage structure) took place before the intended development of skilled workers (*ibid.*: 150-51). As a factor in explaining the rise of long-term employment, he stressed rather the existence of supporting systems such as the age-based wage structure and the annual increment which emerged in the 1920s (*ibid.*). In fact the result of the debate over how the state, employers and unions should introduce the idea of merit to reflect the wage structure in the mid-1960s had also a significant influence in enhancing the system of long-term employment. The chapter now turns to an analysis of the process of reshaping the wage structure.

4.1.2 Reshaping of the wage structure

The system of wage determination (wage structure, hereafter) is another important institution which underpins the evolution of the skill development system. When the wage is determined largely by the length of service (or age), it tends to motivate workers to stay with the same company. This then enhances the internal labour market and company-centred skill development. While the seniority-based wage structure existed to some extent before the end of the war,¹² the strong labour movement in the 1940s-50s enhanced the practice of long-term employment, and together this type of wage structure.

As Japan began to grow rapidly in the early 1960s, the reform of the wage structure became central to the larger attempt to modernise the structure of labour. As discussed, this was triggered by the recommendation of the Special Economic Committee (SEC) in 1963. Despite the government's intention, the wage structure

¹² Until the early 1920s, the wage structure reflected occupational difference.

which emerged was very different from what was recommended. The outcome caused a rise in the wage level, which reflected both age and merit, which was quite different from the occupation-based wage structure as the SEC envisioned. While both seniority and merit have always determined rewards in Japan, the debate led to an increase in the weight given to merit. The uniqueness of the structure was that the element of merit (i.e. combining skills, ability and personal aptitude) was assessed internally based on internally designed job and skills or ability categories. This contributed further to enhancing long-term employment, the internal labour market and company-centred skill development –the practices from which the government had intended to shift away.

The recommendation of the SEC is viewed as the most comprehensive and ambitious attempt to restructure the workforce in the post-war period (e.g. Ishida, 1990, Inui, 1990, Urabe and Ohmura, 1983). However, the recommendation was studied and its feasibility and suitability for the Japanese workplace were debated among employers and unions over the next 10 years. This process was crucial from the point of view of the skill development system. The process acted *de facto* as a process of negotiation for the concerns, ideas and interests of different stakeholders and allowed them to explore an optimal compromise. The outcome had a significant impact on the consolidation of long-term employment, the internal labour market and company-centred skill development.

The debates never really took the form of formal ‘negotiations’ in which the representatives of the government, employers and unions sat at the same table. Each party, in particular employers and unions, did have the opportunity, however, to debate within themselves and they developed arguments to reflect the interests of their own groups and respond to those of other parties. Significantly, when the debate concluded, all the parties were at some level of agreement in terms of a general approach to human resource management.

Government’s position

The government felt strongly that the existing systems could not meet the demands of the new economy. The SEC recommendation states, “current changes in the skill

structure [away from a small number of skilled workers and a large number of unskilled ones] had made the existing family-like labour structure [long-term employment, age-based payment] obsolete” (Keizaishin, 1963). The debate on reforming the wage structure can be traced back to the mid-1950s, when Nikkeiren, the employer’s federation, called the first meeting on the issue with representatives of employers. The SEC recommendation of 1963 largely endorsed the position developed at those meetings. Nikkeiren’s original proposal and the SEC recommendation were influenced heavily by the American model, as mentioned. Ishida (1990) notes that although they sensed the need for reform, as the economy move beyond the reconstruction phase, employers and policymakers had not original ideas at the time on how to ‘modernise’ labour (e.g. Ishida, 1990; Inui, 1990). This resulted in the search for a model elsewhere which resulted in the conclusion that labour should be organised by occupation rather than company and that merit rather than age, or length of service, should play a more substantial role in wage determination.

Debate among employers

The discussions on wage structure among employer representatives, organised by Nikkeiren, provide an excellent account of employers’ ideas and concerns at the time (Nikkeiren, 1955, 1960, 1964 in Inui, 1990; Ishida, 1990; Nikkeiren, 1969). The views that supported structuring wages on the basis of job/occupation categories highlighted a growing demand by workers, in particular younger ones, that wages reflect merit and performance rather than age. One supporter of Nikkeiren’s original proposal commented that, “a closed labour market in Japan leads to a mismatch between the required ability (and skills) and the number of the posts which require such ability” (Nikkeiren, 1960).

However, these concerns were challenged by those stressed the incompatibility of a merit-based structure with the existing system. A few companies did go ahead and adopt the new wage structure. One of them, Tokyo Electric, reported a conflict with the existing practice of long-term employment. The report indicated that: 1) as many of the workers are in the same job categories, there is no measure to differentiate them and that is leading to a decline in morale; 2) to place both a worker with many years of

experience in the company and a fresh graduate from a technical high school in the same job rank does not suit the atmosphere in the workplace; and 3) workers with the required ability and skills cannot be included in the job category unless there is a vacancy in the post (Inui, 1990:99). Ishida (1990) has argued that, as a result of the strong labour movement in 1940s-50s, the wage system based on age (seniority) was well-accepted by then as a fair system of payment and that that sense of 'fairness' played a significant role in preventing the abandonment of the age-based wage structure.

The unsuitability of a wage structure based on job or occupation was particularly articulated in relation to the unique notion of ability/skills; in other words, what constituted a so-called 'able' worker in the Japanese workplace. The idea that the value of the job (rather than individual ability, character or hidden potential) determines the wage was foreign to Japan (Ishida, 1990:33). Employers pointed out that the term 'able person' tended to include one's personal aptitudes, personality and attitudes such as sincerity and emotional disposition (Nikkeiren, 1969). Participants in the discussions argued that the adoption of a job/occupation based wage structure could not account for those elements of skills/ability which are important for one's job performance (*ibid.*). This notion of ability (or able person) is largely constructed by the practice of long-term employment. Urabe (1978) argues that long-term employment required particular types of skills and ability. He states that it creates a closed human relationship in which the characteristics needed to maintain a general human relationship constitute an important part of one's 'ability'. The participants in the discussion also pointed out that "when the job/occupation-based structure presupposes the external labour market structure, we cannot adopt the wage structure in the same way when our system is based on the long-term employment practice" (Nikkeiren, 1960).

This notion of ability, which includes personal aptitudes and attitudes towards work and the company, made it technically impossible to standardise job/occupation categories and skills at the national level. It highlighted the need for each company to develop its own job categories and set required skills and the wage level accordingly. The fate of long-term employment (i.e. whether to abandon it to create an occupation-

based external labour market structure) was not raised in the above discussion among employers. This is perhaps because the combination of the legacy of the union movement and labour shortages at the time drove companies to support the long-term employment. The debate on the reform of the wage structure eventually ended in the mid-1960s with the acceptance of a structure that reflected both age and merit, although the introduction and assessment of merit was left to individual companies. The outcome of the debate was therefore that the systems such as:

an in-house union, aged-based wage structure and life-term employment may appear to be contradictory, (when compared) to a more modern system based on occupation/job based wage structure, industry-based unions and even short-term contract employment system. However, the uniqueness of Japanese labour management is that it creates an original Japanese version by tactfully combining them (Ministry of Labour, 1963, in Ishida, 1990:46).

Thus, an agreement on the wage structure was reached through discussions and careful study by employer representatives and reflected their institutional conditions and the notion of work and ability, which had been developed in the 1940s-50s.

Beside the subsequent enhancement of long-term employment, the implications of this conclusion for the subsequent skill development system were considerable. In fact, the above quotation continues to state that “in order to compete strongly in the international market, we need to pursue the Japanese approach. In order to achieve that, it is inevitable to increase employees’ skills and their human development” (ibid.). Thereafter, Nikkeiren, the employers’ federation, continued to advocate the importance of developing workers’ skills and ability and their maximum utilisation as a strategy to enhance international competitiveness (MOL, 1964). However, these skills and abilities were to be determined by individual companies. As a result, as companies invested increasingly in the skill development of workers, the nature of the skills emphasised became increasingly company-specific.

Labour’s view

Here it is important to note the response from the unions to the new wage structure developed by Nikkeiren. The Nikkeiren proposal, which allowed employers to determine what constitutes being skilled and to assess workers accordingly, was in fact

a very alarming move from the workers' point of view as it expanded the room for management manipulation. Like the study group organised by Nikkeiren, one of the (largely) public sector unions (Sohyo¹³) organised a meeting with those responsible for wages in several industries to decide a position and draft its own reform plan.

Sohyo had to face the reality that there was a growing gap between the interests of workers and the ideology of the union (Ishida, 1990). Discussions with the representatives of industries highlighted that younger workers, in particular, wanted a system which would reflect merit or performance and felt that the age-based system was demoralising (Sohyo, 1961). As the union had campaigned long for the egalitarian, age-based structure supported by long-term employment, it was in a difficult position. One of the participants critically commented that, "You (Sohyo) cannot attack the (Nikkeiren's) proposal simply on the grounds of politics and ideology. You have to show (concretely) how the proposal is wrong, or does not work, to be able to convince workers (ibid.)". As it represented the interests of its members, this reality could not be overlooked, and led Sohyo to accept the differentiation of wages by merit. After considering various options, Sohyo choose a wage structure in which the wage level was nationally standardised according to occupation and rank within the categories, as the only option that could seriously challenge Nikkeiren's proposal (Ishida, 1990:58).

The union did not pursue this alternative, however. Ishida suggests two main reasons for this (ibid.). Firstly, it was feared that a massive change in the organisation of labour caused by the pursuit of the occupation-based wage system would undermine the cohesion of workers and the labour movement generally. It was not an unreasonable concern as labour had worked long and hard to establish the system that had contributed to stable employment for workers over the previous 20 years. Secondly, there was a concern that the pursuit of the alternative would result in conflicts within the union, to the extent that it would lead to its break-up. Sohyo representative commented that, "once you bring confusion into the organisation, it would be a massive thing to bring [the organisation] back together again. The chaos would make the organisation open to attack until it was completely destroyed" (Sohyo,

¹³ General Council of Trade Unions of Japan.

1962). It is not clear what he meant by confusion. However, it seems that the disagreements as to the extent the union (Sohyo) should pursue its ideology, or be responsive to the changing needs of its members, might be detrimental to the existence of the union itself. As a result, the union could not manage to put forward its counter-proposal and thus could not launch effective opposition to the proposal of Nikkeiren, the employers' federation. The union's silence in this case was in effect an endorsement of Nikkeiren's view. Sohyo's dilemma shows that the conflicting ideas and interests within the union itself also played a part in the building of an important institution, in this case the wage structure, and with it the larger skill development system.

4.2 Education and work

The coordination of education and work is another vital institution which characterises the skill development system. General and basic education can provide a foundation for continuous learning after formal schooling is completed, while school-based vocational education can play a prominent role in the overall skill development system. Formal education can be directly coordinated through manpower planning by assigning a quota to specific types of education (i.e. higher education, polytechnics) as presently practised in Singapore, while coordination can also be less structured and subtle as in Japan.

The environment in post-war Japan, particularly in the 1960s, was more supportive of greater coordination between education and the economy (and work) relative to the pre-war period. From the late 1950s, industry called for the enhancement of school-based VET to overcome a serious shortage of scientists, technicians and engineers (e.g. Nikkeiren in 1956, Tokyo Chamber of Commerce in 1961). Technological advancements (including automation) and the need for further innovation required more trained workers. In the early 1960s the Ministry of Education (hereafter: Monbusho) was intrigued by the idea of increasing efficiency in educational investment (and thus manpower planning) as it was influenced by human capital theory in the US. The SEC in 1963 also stressed the need for the long-term planning of

human resources (Keizaishin, 1963). However, the coordination of education and the economy was never achieved as the government intended.

The nature of education and its relation to the economy and work came to reflect principally the interests of non-state sectors (teachers and parents) in the post-war period. Since a nationally based teachers' union played a major role in promoting its causes, the contests of different interests took a more polarised structure: the union against Monbusho, while labour issues tended to be dealt with between individual in-house unions and employers and thus the union movement rarely targeted the government. Education in the post-war period began with a severe ideological divide between progressives and conservatives, as well as distrust of the government among ordinary teachers. The development of formal education, including its relation to the economy and work, was thus shaped by the conflicts and negotiations between the teachers' union and Monbusho, which represented the progressives and the conservatives, respectively. Before analysing this process, a brief discussion is provided on the ideological and emotional divides.

4.2.1 Ideological and emotional basis for democratisation of education

While the democratisation of the education system was initiated by the occupation force, several ideological and emotional forces in society also supported the democratisation process. These were socialist, communist and liberal ideologies as well as a deep emotional resentment against pre-war education and the state's control of it. Altogether these forces came to support a strong sense of liberal, democratic and egalitarian values in education. They gradually combined and were translated into the actions of the teachers' unions, notably the Japan Teachers' Union (hereafter: Nikkyoso), which was the largest counterforce against the state's control of education until the union's schism in 1989.

Divisions within society, based on ideas, ideologies and interests, were manifested in the two most contested areas: the control of education and the nature of education. The progressive forces¹⁴ supported the construction of a democratic system,

¹⁴ Nikkyoso, supported by its ideologues and the emotional sentiments of ordinary teachers and parents, played a central role in representing the progressive forces.

which was initiated by the occupation force, and they rejected the control of education by the state. Meanwhile the conservatives wanted to maintain the state's control of the system. Regarding the nature of education, the progressives emphasised the construction of an egalitarian, non-elitist system with a focus on humanistic education, while the conservatives stressed the importance of teaching traditional, conservative values (i.e. collectivism and loyalty) and the idea that schooling is for the skill development of the workforce and should support the economy.

The political context immediately following the war was most favourable to the progressives. The centre of the progressive forces was the teachers' unions. The occupation force saw the centralised structure and control of the pre-war education system as a serious threat to the democratisation of post-war Japan and found teachers' unions as the most serious counterforce to Monbusho. As part of the democratisation process, military personnel who had been stationed in each school were removed and over 120,000 teachers (one-fourth of those in the profession) were judged to be collaborators and sympathisers of the military regime and were purged (Cummings, 1980:30). At the same time, non-compliant political activists and intellectuals who were imprisoned during the war were released and many of them joined the progressive movement (e.g. Cummings, 1980; Aspinall, 2001). Nikkyoso –which later became the largest and most powerful teachers' union in Japan– was first established as Zenkyo (All Japan Teachers' Union) in 1945 with a strong communist influence.

Support for the progressives was deeper than the specific ideological stance of the leaders, however. The progressives were also supported by the emotional sentiments and beliefs of ordinary teachers and, to some extent, of the general public at the time. By witnessing the purges of former preachers and supporters of the pre-war education system, many teachers felt a sense of guilt, in that their teaching of military and patriotic education encouraged children to go to the battlefields and caused many of them to die (e.g. Nikkyoso, 1970; Cummings 1980). Their sense of guilt resulted in a deep resentment towards the pre-war education system and the state's control, and renewed their commitment to providing a democratic education (e.g. Nikkyoso, 1970; Aspinall 2001). Despite the strong communist influence in Zenkyo's leadership, many ordinary teachers were not communist supporters. However, these teachers (actually

98% of primary school teachers) became members of Zenkyo by 1947.¹⁵ Aspinall (2001:28) has explained that one of the main reasons for joining Zenkyo, rather than politically moderate unions, was that they found Zenkyo to be the strongest (and most radical) and as such could “protect them from intrusive control” by the state. Another union (Tokyokyo) which took a more friendly approach to the government was viewed with suspicion and “scared away many moderate teachers who feared government control of education more than they feared the leftist and allegedly communist-dominated Zenkyo” (Smethurst, 1978 in *ibid*:29).

By June 1947, Zenkyo was renamed Nikkyoso and led a campaign calling for non-elitist and egalitarian education. The union was careful, and in fact tactful, in appealing to the sentiments of the general public and reflected the public’s views in its strategies so as to mobilise support for its causes. The wishes of the majority of parents to provide their children with equal (or unified) schooling went against any attempts by Monbusho to differentiate children by ability, which was seen as discriminatory and leading to the creation of an elitist system. Nikkyoso’s campaign for an egalitarian, comprehensive schooling with unified teaching thus went hand-in-hand with public sentiment. As a result, Nikkyoso managed, from time to time, to organise nation-wide action against education reforms put forward by Monbusho by drawing on support from other unions,¹⁶ intellectuals and the general public.

At a deeper level, the experiences of progressive education in the pre-war period also played a role in the democratisation of education following the war (Horio, 1994, 1997). After all, democratic education was not totally foreign to the Japanese education system. If we trace the history back to Meiji Japan, we find that liberal education was first supported, but overcome by a more nationalistic approach by 1890. The progressive philosophy of teaching did manage to spread however, and was widely practised in the 1920s at the time of the Taisho democracy. The education reform that

¹⁵ In addition to the ideological and emotional factors at play, the severe economic conditions following the war also generated strong support for Nikkyoso among ordinary teachers. Many of these teachers had to take on second and third jobs to make ends meet. While not being enthusiastic about its ideological stance, teachers thought that Nikkyoso’s often radical and confrontational approach at the time would be most effective in winning better working conditions for them.

¹⁶ In fact, Nikkyoso was the largest member of the national labour union federation and therefore its actions were often regarded as leading the struggle against control by the state and, to a lesser extent, against capitalists on behalf of all unions (Aspinall, 2001).

followed the war has long been a source of controversy as to whether it was simply a foreign imposition, incompatible with local culture and traditions, or a manifestation of Japan's restatement of democratic and liberal education with a renewed sense of pursuing a new educational ideal (e.g. Horio, 1997). The conservatives and the general public tended to support the former view, while the progressives took the latter view. However, the conflict between the conservatives and the progressives had a long history and it is difficult to accept that the reform during the occupation was simply a foreign imposition divorced from Japanese tradition and culture. The US education mission which arrived in 1946 took a leading role in education reform but, while the conservatives were dismayed, the reform was met with considerable enthusiasm from the progressives (including progressive elements within Monbusho) (e.g. Cummings, 1980).

If the education reform was simply a foreign imposition, the government could have simply overturned it when the occupation ended in 1951. The government did, in fact, reverse some of the reforms. For example, while the reform introduced an elective system for boards of education, the government enacted a law which provided an appointment system (Nikkyoso, 1970). This change passed the Diet literally in the presence of the police force in 1952. However, with every step the government took to regain its control of education, it faced formidable opposition organised by Nikkyoso. The development of education in post-war Japan thus was shaped by this conflict, negotiation and compromise between the progressives and the conservatives. In the end, Japan developed a post-war system very different from its pre-war system.

4.2.2 The development of egalitarianism in education

Egalitarianism in education has been pursued through the promotion of a non-differentiated approach under the principle of equal opportunity.¹⁷ For compulsory education, even today 98% of the cohort attends public schools and receives a unified curriculum and teaching. Although differentiation does take place at the high school level, the majority of the cohort progresses graduates from high school, receiving the

¹⁷ As proclaimed in the Fundamental Law of Education legislated in 1946.

same 'high school diploma' regardless of the type of school.¹⁸ This high progression rate is supported by a particular conception of 'ability' among most teachers and parents. They downplay importance of differences in the innate abilities of children, and instead accept that differences in attainment are due largely to the quality of teaching and children's own effort.¹⁹ In addition, the nature of moral education at school has helped to remove a sense of 'class' and thus has enhanced egalitarian sentiment among the post-war generation.

The egalitarian nature of education has shaped the skill development system in Japan in several ways. It has encouraged a large proportion of the population to obtain at least a high school qualification. This has meant that a large proportion of the workforce has a high general capacity and is able to handle an intermediate-high level of technical matters, as well as changes and new demands. This high and flat distribution of skills has contributed to the efficiency of on-the-job training. Companies can provide uniform training and expect similar results, as they assume that the majority of their employees have a similar decent level of general and basic skills and knowledge. This distribution has reduced skill and knowledge gaps and allowed, for example, design engineers, technicians and shop-floor workers to work together, literally at the same table (Brown, Green and Lauder, 2001:112). This has greatly enhanced team-work in the workplace. The relatively narrow skills/knowledge gap makes it possible to rotate employees in different positions as they can be expected to learn quickly in new positions.

How has the egalitarian system evolved? The question is addressed below by analysing two educational movements in the 1960s. While the effort to achieve and maintain the egalitarian system has been continuous since 1945, these two events indicate the nature and tactics of such efforts, and demonstrate the process by which

¹⁸ The progression rate exceeded 70% by 1965 (Monbusho statistics).

¹⁹ This conception of ability was only formed from the late 1950s. The education debates of the early 1950s indicate a strong belief among teachers of differences in innate ability but that view changed towards the end of the decade when differentiation was increasingly seen by teachers as 'discrimination' against students. Kariya (1995:176) notes that the first report by a teacher expressing doubts about capability based on innate ability came out in an education conference in 1958. This teacher further argued that "to rank students by such a static notion of ability which then would determine their future would bring all but damage" (ibid.). Combined with growing concerns over students' declining morale caused by differentiation, such opposition led eventually to a denial of any difference in innate ability altogether.

conflicts, negotiations and compromises of different ideas and interests have shaped the system. One such movement was the struggle against the introduction of a nation-wide achievement test and the other was a campaign for 'high school education for all' to enable all junior high school graduates to enter high school (Nikkyoso, 1970; ECHPJE, 1983 (7)).

Expansion of a national achievement test

In 1961, Monbusho announced the expansion of the national achievement test from a random 20% of the cohort²⁰ to all students. The announcement immediately met with opposition from the Nikkyoso which regarded such a test as a tool for early selection of 'high (and low) talents' to serve the needs of the national economy and as a means for the increased control of education by the state (Nikkyoso, 1970:847). The union also argued that the test would focus too much attention on academic achievement in schools which would run counter to the principle of democratic education (*ibid.*). Opposition to the test grew into a massive national campaign in the following five years, involving not only Nikkyoso and its members, but also intellectuals, parents and, in some cases, students themselves (*ibid.*:831-871).

A strong link between the achievement test and manpower planning was suspected largely due to the timing of the Monbusho's announcement. Since the late 1950s, there had been an increased demand from industry for intermediate and advanced level technicians and engineers (e.g. Nikkeiren, the employers' federation, in 1956, Tokyo Chamber of Commerce in 1961). The national economic plan announced in 1960 aimed at a doubling of national income in the next decade. The recommendations of the SEC on education and training singled out the need for long-term education planning to support economic growth²¹ and called for a specialist study on planning for manpower development²² (The Editorial Committee on History of Post-war Japanese Education (ECHPJE, 1983 (7):78-94). Monbusho's announcement

²⁰ The national achievement test had been conducted since 1956, however it targeted at only a random 20% of students (ECHPJE, 1983 (8):11).

²¹ It included the need for various types of technical workers and, in particular, for 170,000 scientists and engineers over the next 10 years to achieve the objectives of the plan (ECHPJE, 1983 (8):11).

²² For the following 10 years, it planned to educate 170,000 graduate engineers, along with 450,000 high school graduate technicians and 700,000 junior high school graduates who would receive vocational training (ECHPJE, 1983 (7):207).

on the implementation of the nation-wide test was made in the following year. The intention of using test results for national human resource development was also clear from the objectives for the expansion of the test presented by the Monbusho itself. It listed: 1) human resource development, 2) the selection of entry to high school and 3) to learn the (existing) conditions of education (Nikkyoso, 1970:833). The first two objectives were never again repeated in the face of immediate objections expressed by Nikkyoso. Monbusho insisted that the third objective was the sole reason for expanded testing (ibid.). Suspicion over the link between the test and manpower planning was further enhanced as the White Paper of Education in 1962 titled 'Rapid Economic Growth and Education' stressed the efficiency of investment in education based on manpower planning. The SEC recommendation of 1963 included a substantial section on human resource development which stressed the need for identifying and developing the 'high talent' and the need to provide education according to one's ability (Keizaishin, 1963).

The interests of various stakeholders were contested in this movement. It related, in part, to the issue of the control of education. The tension and conflicts over increased state control of education after the occupation have been mentioned. The implementation of a nation-wide test reminded Nikkyoso of a similar test implemented under the military regime, which examined whether statist and militaristic thoughts were well diffused among children (Nikkyoso, 1970:833). In a letter to Monbusho, Nikkyoso raised the issue, asking, "Why are teachers themselves not asked to take the initiative in designing the test if the objective [of the test] is to reflect and improve the conditions of education...The imposition by the state ignoring teachers suggests that it is an attempt to increase the control of education by the state". It further stated that "the test is to serve the national policy for rapid economic growth" (ibid.). Monbusho's reply denied the intention of state control and insisted that the test was designed "to collect scientific information to contribute to improved academic achievement" (ibid.: 835-838).

Nikkyoso was also troubled by the prospect that the test would differentiate schools and children. It wrote to parents expressing its fear that such differentiation would lead to a polarised social structure consisting of leaders (of the economy) and the

rest (labour force) and that this would jeopardise 'the equal opportunity of education' (Nikkyoso, 1970:847). The idea appealed to the majority of parents who wanted to ensure that their children had an equal opportunity to achieve their potential, although the opposition from parents was fuelled by various scandals associated with the test in subsequent years, as discussed below.

Despite strong opposition, Monbusho implemented the first nation-wide test in 1961. It announced a 94% rate of implementation, but the 'success' of the test was contested by Nikkyoso (Nikkyoso, 1970:848). The union reported that 90% of the schools in one prefecture, 60% in three other prefectures and some schools in 10 other prefectures did not implement the test. The government responded with force: 160 schools and offices were raided by police; 2,000 people were questioned; 15 people were prosecuted; 20 teachers were fired; 63 were suspended; 652 were fined and 1,189 received warnings (EHPJE, 1983 (7):11). Even for schools which implemented the test, many tests were turned in blank as some students boycotted, others refused to write in their names and teachers refused to mark the test (Nikkyoso, 1970:848, 850). The tests were repeated in the following two years even though an increased number of prefectures and schools boycotted them. The insistence by Monbusho to implement the test with various intimidations and threats to schools and prefectures re-enforced Nikkyoso's view that the test represented an increase in state control. The issue of whether the state could impose on schools to implement the test was contested in several court cases. Out of six cases, three claimed that such imposition was an illegal intervention in education by the state (EHPJE, 1983 (8):210).

Reports on the experiences of two prefectures participating in the test added further momentum to the movement against nation-wide testing (*ibid.*:191, 196-201). Since the test results were ranked by prefectures and made public, they caused severe competition among the prefectures. The two prefectures (Ehime and Kagawa) that dominated the first and second positions competed fiercely. Schools in both prefectures became entirely focused on the test and the whole existence of schools was dedicated to winning the competition. More scandalous reports followed. It was reported that some students were asked to be absent on the day of the test; teachers also discretely showed the answers to students during the test; and schools extended their

hours of teaching to drill students (ibid.:193). A study by a group of academics evaluating the situation (Ehime/Kagawa study mission, 1964) caused huge public dismay. Parents and educationalists thus opposed the test on the grounds that it was 'distorting school education'. Newspaper editorials asked: 'do we still need the test?' and argued that it resulted in more damage than benefit (Mainichi Shinbun, 1966).

The test was implemented from 1961 to 1963. In 1964, however, Monbusho announced that the test would now target only 20% of the cohort. Even for this 20%, one prefecture (Fukuoka) refused to implement the test in 1965. In that case, the unity of Nikkyoso members and the union's close links with the local education authority led to the refusal of the test (EHPJE, 1983 (8):202-210). The movement against the nation-wide test ended, in effect, in 1966 when Monbusho announced that it would implement a similar test (20%) only once every three years (MOESSC, 1966; Nikkyoso, 1967).

A campaign for 'high school education for all'

When the baby-boom generation approached the age of high school entrance in the late 1950s, there was a desire that all students should have equal opportunity to obtain a high school education. The number of students in the cohort well exceeded the existing number of high school places, and it was feared that selection by entrance examination would deprive a large number of students of a high school education. Nikkyoso acted promptly by presenting the slogan, 'High School Education for All' at its annual conference in 1959, which demanded the abolition of high school entrance examinations.

Nikkyoso played a central role in organising the campaign and it grew into a major national movement involving parents and other labour unions. Nikkyoso's position was consistent with the one discussed in the implementation of the national test. It opposed any attempts to differentiate (and discriminate) among children which it felt would lead to 'a dual structure of labour' (National Committee on High School Education for All in 1962, in ibid.:207). Nikkyoso proposed the 'Three Principles for High School Education': 1) the adoption of small catchment areas (to reduce school differentiation); 2) co-education; and 3) comprehensive high schools (EHPJE, 1983

(8):206). However, the most crucial role in this movement was played by parents (mothers in particular) who wished to equip their children at least with a high school education. The trend that the majority of companies started requesting job applicants to have at least a high school diploma enhanced such wishes. The idea of 'high school education for the working class' was also supported by other unions (notably Sohyo) and 17 other social associations.²³ A campaign to collect 10 million signatures was carried out by Sohyo in 1962 in support of the movement and increased awareness of the movement among the general public (Nikkyoso, 1970:635).

The movement went directly against the prevailing policy in the government. Monbusho was promoting efficiency of investment in education which highlighted the importance of 'manpower planning' (MOESSC, 1962). The SEC recommended that education "should provide a range of routes which are suited to individual preferences and ability" (Keizaishin, 1964). The SEC presented the view that, "Although there is an increase in the demand for university education, the proportion of the population that possesses 'high talents' is predetermined, and thus we need to be careful not to lower the standard for this group" (ibid). Thus, the movement to promote 'high school entry for all' clashed directly with the government's vision of education. The Minister of Education responded to Nikkyoso with strong criticism, stating that "it appeared that the movement was selected by Nikkyoso to mobilise the mass for its own political struggle based on a particular ideology...It is an attempt to use an innocent wish of parents for its political cause" (ECHPJE, 1983 (7):13).

The campaign eventually succeeded in increasing the quota for high school entrants. In 1963, direct negotiations involving over 1,200 campaigners (parents, teachers and other workers) with Monbusho led the government to promise that it would not stick to the planned progression rate of 63.5% (Nikkyoso, 1970:643). A campaign organised the following year involved 510 districts throughout the country. This time the representatives of Zennyukyo²⁴ negotiated directly with the Minister of Education and obtained his promise to accept a progression rate of 70%. As the campaign continued, the progression rate increased by 2-3% every year, such that it

²³ This included the National Cultural Conference, Assembly by Mothers and other women's groups (Nikkyoso, 1970:635).

²⁴ National Committee on High School Education for All.

rose overall from 57.8% in 1960 to 72% in 1965 (ibid.:646). In 1966, Nikkyoso pledged that it would continue to fight for an increased number of high schools and other financial resources to achieve a 77.5% progression rate (ibid.:647).

We need to be careful, however, not to read this result simply as a victory for Nikkyoso (and parents) over Monbusho. The Central Committee of Education Reform set up in 1963 recommended the diversification of high schools and in particular the enhancement of technical education and training (CCE, 1963). It was apparent that the recommendation attempted to address the need to produce technicians and engineers. While Monbusho eventually increased the quota for high school entry and the number of high schools, as noted, the majority of the increase was for technical (or other occupational) high schools, not normal academic schools (ECHPJE, 1983 (7):14). Although the same 'high school diploma' was given to all graduates, this was not necessarily what parents wanted. They wanted to send their children to normal academic schools which were seen to be better equipped to enable students to progress on to university. Nikkyoso noted later that it was a mistake of the campaign that it did not specify the type of high schools to be increased (Nikkyoso, 1970). The fact that the entrance examination was not abolished meant that students continued to be selected on the basis of academic attainment. In many cases, this resulted in students going to technical high schools against their wishes simply because their scores were not high enough for them to go to normal schools. This led to a decline of morale and a lack of interest in subjects among technical high school students. As long-term employment was consolidated in mid-1960s, employers increasingly began to prefer recruiting graduates from high-ranking normal academic schools rather than technical schools. This exacerbated the situation of technical students. Studies of occupational high schools conducted by both Nikkyoso and Monbusho highlighted the problem and the failure of technical schools (ECHPJE, 1983 (7)).

Thus, at the end of this movement, both Nikkyoso (and parents) and Monbusho had not fully fulfilled their interests. Nikkyoso could not ensure the equal high school education for all and Monbusho failed to ensure that high school education served the needs of the economy. However, while Nikkyoso (and parents) and Monbusho (but also the government in general) contested their interests, the general interest for

students to obtain a high school education continued to grow. By 1970, the proportion of the cohort which progressed on to high school exceeded 80%.

This high progression rate has formed an important element of the skill development system. This achievement has, first of all, increased the trainability of employees and thus the efficiency of on-the-job training. It also reduced the skills and knowledge gaps between, for instance, engineers, technicians and shop floor workers, which facilitated their teamwork and collective learning. At the same time, Nikkyoso's campaign for 'high school education for all', with its strong focus on progression along normal academic routes, led to the unpopularity of vocational schooling and the eventually weakening of the role of formal vocational training in Japan.

Conclusion

The changes that derived from defeat in the war and the occupation were not restricted to physical and visible changes. The occupation regime created room for alternative, progressive forces, ideas and interests to advance, and this allowed for a relative balance of power among the state, employers and labour in post-war Japan. The evolution of institutions and the subsequent shaping of the skill development system up to the 1960s reflected this change and non-state actors had greater influence on the formation of institutions, compared to the pre-war period.

The greater influence of non-state actors was highlighted through an analysis of the evolution of such institutions as long-term employment, the wage structure and the egalitarian formal education system. In the early 1960s, the government made a serious attempt to modernise labour management practices by calling for a shift away from the existing approach of long-term employment and the seniority-based wage structure. However, this idea was never implemented in the way it was intended, as it did not go hand-in-hand with the interests of employers and labour. The unprecedented rise of unionism in the early decades of the post-war period resulted in job security for workers while employers eventually opted to seek their interests by accepting this demand from labour. The rapid economic growth and labour shortages of the early 1960s encouraged employers to use the long-term employment system to fulfil their needs in terms of skill development and labour retention. The outcome was the

enhancement of the long-term employment system. While the government's idea was to introduce a national, standardised wage system based on occupation/job categories, the wage structure which emerged was very different, although it did reflect merit more than seniority.

Education in the post-war period began with a severe ideological divide. The progressive forces (notably teachers' unions) endorsed the establishment of democracy, which was initiated by the occupation force, and rejected the control of education by the state. At the same time, conservatives (i.e. Monbusho²⁵) attempted to maintain the state's control. The end of the occupation allowed Monbusho to reverse some of the education reforms undertaken during the occupation. However, the state's initiative to shape the education system met strong opposition at almost every step. Thus, the development of the education system in the post-war period was shaped by the conflict, negotiations and compromises involving the progressives and the conservatives.

The above analysis indicates that the outcomes of negotiations among stakeholders had a considerable impact on the subsequent formation of institutions that made up the skill development system. In post-war Japan, the outcomes of such negotiations clearly reflected the balance of power achieved by the weakening of state power following the occupation. The next chapter investigates the socio-economic forces of the 1960s and thereafter which have shaped the subsequent evolution of the skill development system.

²⁵ Monbusho was renamed Monbu-Kagakusho (or Monkasho, for short) in January 2001. The English translation is: Ministry of Education, Culture, Sports, Science and Technology.

Chapter 5 Effect of the social agreement on employment and skills (1960s-1980s)

The previous chapter explained the evolution of the key institutions that provided the basis for the formation of the skill development system. These institutions included not only the system of long-term employment and the hybrid seniority and performance-based wage system but also the increased autonomy of the education system from the interests of business and the national economy. These outcomes, which effectively constituted social agreements, were the result of informal and formal negotiations among the tripartite actors in the 15 years following the war.

These social agreements were increasingly challenged in the light of a changing socio-economic situation from the mid-1960s onward. These agreements did, however, continue to provide the framework for the choices and actions of the tripartite actors as employers, workers and, to some extent, the government responded to the new challenges. This is most evident in the process by which employers and unions sought to maintain the social agreement on employment while responding to new economic and technological challenges and disruptions. These agreements facilitated employers, often unintentionally, to respond to new skill demands by training existing workers, thus laying the basis for the development of the enterprise-centred skills system. The government became increasingly less interventionist in the skill development of workers and focused on the creation of an appropriate policy environment to support enterprise initiatives. The autonomy of the education sector, achieved through the democratisation of education following the war, also contributed to the particular pattern of the school-to-work transition.

While the social agreements continued to provide the guiding framework, new challenges forced original agreements to be modified and sometimes led to unintended

consequences. Employers sought to reduce personnel costs without compromising the quality and quantity of work, and this led, over time, to very tight personnel practices, accompanied by changes in the wage structure and personnel appraisal systems. Skills were the main components of such appraisal systems. While the advancement of technology encouraged employers to take a more intentional and systematic approach to skill development, the economic climate led them also to develop systems that encouraged workers to learn, utilise their skills and work hard. While long-term employment became a social norm, the majority of workers responded to company demands, both willingly or unwillingly. In education, while the principle of equal opportunity allowed children from all backgrounds to progress on to high school, they were increasingly ranked by their grades, schools and universities, which turned the system into mechanism for selecting students and workers (Inui, 1990; Kumazawa, 1993). As a student's ranking in the education system closely mirrored his/her prospects of employment, coordination between education and work was gradually achieved, albeit unintentionally. The change enhanced further the formation of the enterprise-centred skills system.

The objective of this chapter is to examine the effects of institutions, which evolved as social agreements, on the shaping of the skill development system. The effects are investigated through an analysis of technological innovation in the 1960s and the economic challenges of the 1970s and 1980s. The analysis will demonstrate the importance of social agreements as providing the basic conditions for the development of the enterprise-centred skills system from the 1960s onward. It will also show how efforts to maintain the social agreements led to unintended consequences, which further placed enterprises at the centre of skill development. The chapter begins with a brief description of the technological innovations of the 1960s.

5.1 Productivity, technology and employment: Formation of the basic context for the skill development system

From the beginning of its rapid economic growth in the mid-1950s, the major concern for the Japanese economy was to maintain that growth by increasing productivity. The

'productivity movement' in Japan officially began in 1955 with the establishment of the Japan Productivity Centre but momentum for the movement only developed in the early 1960s with a growing consensus that the competitive strategy, based on low-cost production, had reached its limits and productivity increase was necessary to maintain a high level of economic growth (JPC, 1985). The promotion of productivity was achieved mainly through the rationalisation of manufacturing and with the introduction of new technologies (i.e. automation and mechanisation). For example, in the steel industry the pull-over technique (a labour intensive method for producing steel sheet) was replaced by the cold-strip mill process, which significantly reduced the labour input (Hiranuma, 1998:98-9).

The initial reaction from labour unions toward the productivity movement was mixed. While private enterprise unions such as Sodomei and Zenro reacted positively, Sohyo (the main union for public workers)¹ rejected the idea of a productivity movement from the outset, regarding it as a means for the exploitation of workers (e.g. JPC, 1985:ch.3). Most other unions, however, were more accepting of the inevitability of technological innovation, although workers were concerned that new technology, introduced under the banner of productivity increase, might result in large-scale job losses (*ibid.*). The timing could not have been worse. In the late 1950s and early 1960s, Japan was in the midst of an aggressive and prolonged strike in the mining industry (Mitsui-Miike). The strike eventually ended with large-scale lay-offs, which further hardened the unions' position towards technological innovation.

In these circumstances, the choice that many of the enterprises made in adopting new technologies was a distinctive one. Enterprises opted to commit to long-term employment practices and any excess labour resulting from automation would be dealt with by transferring workers to new jobs or relocating them according to the demand for work (i.e. flexible work practices) (Hiranuma, 1998:96). The choice reflected nearly two decades of bitter industrial relations after which employers gradually recognised the damaging effect of confrontational employer-employee relations and accepted their detrimental impact on the long-term growth of their

¹ The English translations are: Japanese Federation of Trade Unions (for Sodomei), Japanese Trade Union Congress (for Zenro Kaigi), and General Council of Trade Unions of Japan (for Sohyo).

enterprises (ibid.; Hyodo, 1997b).

The unions were divided in their opinions toward the new technologies, in part because they were at a crossroads after a decade of industrial action. Despite the considerable growth and achievements of unions in the last decades, the effectiveness of confrontational tactics was increasingly questioned. The bitter labour strike in the mining industry, which ended with massive firing by naming, was indicative of the limitations of aggressive action (Goto, 1994:268). Many workers sought to avoid aggressive labour strikes that did not hold any prospect of success (Hyodo, 1997b:332). In this context, supporters of technological innovation felt that as long as the new technologies led to an increase in enterprise profits, they might be a means to maintain or expand employment security and job opportunities. Although strongly resisted by hard-core members, this view gradually became the dominant view of workers (e.g. JPC, 1985:ch.3). Instead of aggressive tactics, the new discourse of the unions was 'to be aware of management intentions [about the adoption of technology] before decisions are made and to then influence, if possible, the decision-making process' (Hiranuma, 1998:97). As a result, unions, largely among private enterprises, gradually accepted the introduction of new technologies on the basis that employers would commit to long-term employment and that unions would be consulted before the adoption of such technologies (called 'labour pre-consultation') (Hyodo, 1997b:330-351).

The agreement on employment and technological innovation was practiced in dealing with excess labour. When a major steel company (Yahata Steel) decided to close one of its factories, management decided to relocate a large number of workers to a new city, instead of laying them off. This decision was hailed as a good practice for labour relations and afterwards this solution was adopted by other large companies when they sought to 'scrap and build' factories (Hiranuma, 1998:96; Hyodo, 1997b). As the level of excess labour increased in the early 1960s, general agreements and the details of workers' relocation or their transfer to new jobs became part of labour negotiations. For example, when recession hit the textile industry in 1965 and employment was threatened, the president of one company approached the union for its support in resolving the problem of excess labour (Hisamoto, 1998:122). The union appreciated the management effort to maintain the existing workforce and decided to

support the smooth transfer of workers (ibid.).

Over time, labour pre-consultation and flexible work practices gradually became accepted social practice in dealing with excess labour. Statistics show that large-scale lay-offs, in fact, did not take place despite attempts to increase productivity through the automation of production. In 1958-59, 33 out of 373 companies (9%) were affected by labour strikes over the issue of new technologies. The other 340 companies (91%) implemented the adoption without strikes (JPC, 1985:885). In 72% of the cases, unions were informed before the management decision was taken. 43% of those proposals by management required modification to reflect union's demands and 91% of the proposals were modified accordingly (ibid.). Among those companies which adopted new technologies, the majority dealt with excess labour not by lay-offs but by re-assigning workers to new jobs (ibid:387). In terms of work content, this increased the number of new types of job, including the monitoring and supervision of machinery. It is worth noting that in many cases the level of wages and the working hours remained at the same level as for the workers' previous jobs (ibid.).

5.1.1 Early development of the enterprise-centred training system: An unintentional product of the social agreement on employment

The social agreement on long-term employment had a profound impact on the skills system. As long-term employment became the basis for collaborative industrial relations, it also set the parameters for the choice and action of employers and workers in terms of training investment and participation.

The agreement on employment urged employers to respond to new skills demands, which prompted by the new technologies and the reorganisation of work, by re-deploying existing workers instead of hiring skilled workers from the external labour market. In the short-term, this meant that existing workers had to acquire new and/or multiple skills on the job to fulfil new job assignments. In the long-term, employers were required to take employees' skill development seriously.

The processes by which workers developed their skills on the job as they took on new and/or multiple job assignments are well illustrated by Hisamoto (1998) and

Koike (1997). The adaptation of multi-task practices in one large company (Muroran Steel) in the late 1960s was followed by the development of a company-wide training system in 1968 that provided new staff with basic technical training, including the operation of cranes and gas-moulding equipment (Hisamoto, 1998:182). When operators were required to take on maintenance work on top of their usual operator jobs from 1971, they began to receive systematic training for maintenance (ibid.). A study of another steel company shows that while each worker had handled one specific position up to 1956, by 1959 a work unit with 46 members (except for 4) practiced job rotation and the workers were able to handle all of the tasks of other members (ibid:169). In other case, a machinery company moved to multi-tasking around 1963 and that in 1966 workers began to operate more than one machine. This replaced the traditional work practice that one operator would master a single machine over a period of 10-15 years (Hisamoto, 1998:186-188).

The diffusion of job rotation can be used as a proxy for the development of on-the-job training (OJT) (Koike, 1997). Regularised company-wide rotation was widely practiced in large companies by the early 1970s.² A study in 1977 of 79 shop-floors in Shin-Nittetsu, a large steel company, showed that 72% of the jobs were subject to rotation (39% company-wide and 33% with partial rotation). Another study of the steel industry showed that job rotation was extended from within the same shop-floor to neighbouring shop-floors in the mid-1970s. In the machine industry, the practice of rotation also became prevalent by the mid-1970s, in particular in the automobile industry. The same survey also shows that the practice had been extended to include small and medium enterprises by 1979 (Koike, 1997:28-33, 115, 116, 120).

While the above cases show that the practice of job rotation and multi-tasking facilitated the skill development of workers, it is doubtful that the effect on skill development was intentional. Both Koike (1997) and Hisamoto (1998) explain that the widespread practice of these new practices was, instead, a response to labour shortages and changing work organisation at the time. Considering that these flexible job

² An early example of job rotation with the intention of skills development includes a large heavy industry enterprise (Ishikawajima Harima) that established in 1961 its own new training and assessment scheme for its management trainees and initiated job rotation with the intention of skills development (NSKK, 1971:365).

assignments were adopted as a compromise in order to pursue technological innovation while maintaining employment, the effect on skill development needs to be understood as an unintentional by-product of the effort to maintain the social agreement on employment.

5.1.2 A move towards a systematic approach to skills development

Skill development did not, however, remain unintentional for a long time. While rotation and multi-tasking contributed to the efficient deployment of the workforce, a number of companies began to adopt a more systematic approach to skill development from the early to mid-1960s.³ The new approach was more structured and comprehensive and took account of long-term career development.

The case of a large steel company is indicative of the move away from the unintentional approach. Muroran Steel had been developing its training programmes since the late 1950s on an ad hoc basis. However, this effort was formalised when the president presented the company's view on employee education and training in 1961. He defined 'continuous and repetitive training through daily work' as the centre of in-company training and called for each 'work unit' to be considered not only as a mere unit for work but also as a 'learning unit' (Hisamoto, 1998:181-182). The president stipulated also that educating subordinates was a part of supervisors' and managers' responsibilities (ibid.). Other examples show that systematic training plans were also designed for training line-staff in their career development from entry to junior foreman positions (e.g. Yahata Steel in 1962 and Tobata manufacturing) (NSKK, 1971:373-74.). As indicated by the president's words above, in these training plans OJT was no longer an unintentional outcome but rather was placed as a prime mode of skill development. Learning for multi-tasking became no longer a by-product of personnel management either. An analysis of changes in the training programme of a major shipping company (Mitsubishi Zosenjo) shows that technical training began to focus on the development of multi-task workers in the mid-1960s (Sumiya and Koga, 1978:216). Job rotation was

³ There are some companies with long histories of in-company training such as Hitachi Corporation. However, the 1960s witnessed the adoption of in-company training on a large scale, which was often designed by taking account of the long-term career development of workers.

also used increasingly as a tool of skill development. According to surveys in the early 1980s, among those companies that practiced job rotation, almost half of large companies and a quarter of small and medium sized ones adopted it specifically with the objective of skill development (Koike, 1997:28-9).

Where a company-wide plan for skill development already existed, it was enhanced and became more comprehensive, again taking account of long-term career development (e.g. Tokyo Electric in 1960, Tokyo Gas in 1964) (NSKK, 1971). The company-wide education and training plan designed by Tokyo Gas shows that a number of training programmes (from services, accounts, statistics to electrical and technical maintenance) were added between the orientation for new employees and the training of division managers. As explained below, an increased number of large companies (including Toyota and Matsushita) established their own schools and colleges beginning in the late 1950s (NSKK, 1971:388-9).

Systematic training also began to include groups of workers, such as managers, administrators and sales staff, who were not traditionally involved in such training (ibid:364-8, 375-6). A survey by Nikkeiren, the employers' federation, in 1963 of 283 companies shows that 39% of them provided group training for administrative staff and 27% also provided training for sales staff (ibid.:376). The move toward systematic skill development was also reflected in the organisational structure of companies. According to a survey in 1970, nearly 80% of large companies (with 3,000 or more employees) and 60% of all enterprises set up a designated division (or a larger department) responsible for education and training (NSKK, 1971:422).

A number of studies highlight the role of the advancement of technology in explaining the development of a systematic approach to enterprise-based training (e.g. NSKK, 1971; Hiranuma, 1998; JIL, 1999). The introduction of new technologies indeed facilitated the reorganisation of work units in heavy industry by clarifying and delegating more responsibilities to shop-floor supervisors (*sagyochō*) to increase efficiency (e.g. Ishikawajima Harima, Yahata Steel). This required a more systematic approach to training shop-floor supervisors (NSKK, 1971:369, 371). In general, however, although technological advancement may require the periodic upgrading of skills, it does not necessarily lead to the development of a long-term and systematic

skill development system. The move towards a systematic approach was, however, also supported by the consolidation of long-term employment. The latter practice allowed employers to take a long-term business perspective and that included human resource development (Tsutsumi and Namie, 1991). The proportion of large companies with long-term human resource planning increased from just over 10% prior to 1955, to 50% in 1961-1965 and over 60% in 1966-70. Although the proportion was smaller, the trend was similar for small enterprises (NSKK, 1977:421).⁴ Take together, the evidence indicates that the consolidation of long-term employment practices provided an important basis for employers to respond to the rapid advancement of technology with a systematic and long-term skill development strategy.

5.1.3 To be 'skilled' in the new context: an explanation for 'a willingness to learn'

In the evolving work environment, workers, and in particular older ones, had to adapt to a changing notion of what it mean to be 'skilled'. In the context of flexible work practices, it did not mean being 'specialised' (with one or two in-depth skills) but it did mean being able to handle multiple tasks (e.g. Hiranuma, 1998:99-100; Hisamoto, 1998:174-6). The extent to which workers could perform a variety of tasks began to determine one's career (Hisamoto, 1998:189). A case study of two automotive companies indicated that section chiefs (of the shop-floor) were selected from among workers who had experience in 10 to 15 positions (Koike, 1997:120). In this context, there was no need for skilled workers "to hide notes (or specialised skills to perform one or two positions) from others" and instead "they now (as of 1970) provided a copy of the note to others to share the ideas" (Hisamoto, 1998:184).

Automation simplified and standardised skill requirements and this made it possible for the skills that older workers had acquired over many years to be learned in several months. Moreover, older workers could not read manuals written in English

⁴ One survey shows that an orientation programme for new employees was introduced quite early for large companies with 3,000 or more workers (70% between 1945 and 1955). However this practice was also adopted by small and medium sized companies over the 1960s until nearly all companies adopted the programme by the early 1970s (NSKK, 1971:448).

and had a hard time understanding the mechanisms of automatic machinery while younger workers had a higher learning capacity for new technologies (ibid:100). Hisamoto (1998:176-7) also points out that the above situation threatened the authority of formerly 'skilled' workers in the workplace and that promoted these workers to take the initiative in developing their skills. Training for foreman was provided in many large companies by the mid-1950s; however these foremen began to organise and participate in seminars and study groups, even outside of the company and after work, from the late 1950s onward (ibid.).

While some workers skilled in the old style could have moved to companies where those skills were still appreciated, rapid advancement of production technology was a general trend that affected most large companies. More importantly, the long-term employment system created less incentive for workers to move, as changing company meant a reduction in remuneration (Hiranuma, 1998:96). Older workers were worse off if they moved and so they tended to stay with the company while struggling to learn new skills.

Interviews in large machine manufacturing companies, in fact, suggest that learning to be multi-skilled was, or was believed to be, difficult for older workers (Hisamoto, 1998:186-7). In one large automobile company, some of the older skilled workers, who had specialised in one or two operations, initially resisted the move to multi-tasking, but they were converted after a year (ibid:172-3). In other cases, older workers disappeared from the renewed workplace, as they were to shop-floors or other factories where old production methods were still used. Still others were moved to monitoring and maintenance jobs (ibid.:187; Hiranuma, 1998:98). Multi-tasked technical jobs were increasingly filled by younger, more flexible workers, commonly high school graduates.

5.1.4 Limitation of the social agreement on employment in the 1970s and 1980s: the context for deepening the practice of OJT and self-study

The above analysis has highlighted how the evolution of the enterprise-centred skill development system was conditioned by the social agreement on employment that

emerged in the late 1950s and early 1960s. However, this employment agreement was severely challenged by the economic climate of the 1970s and 1980s. While rapid economic growth characterised the 1960s, the recession triggered by the oil shock in the 1970s and the second wave of technological innovation (with micro-electronics) in the early 1980s exerted immense pressure on the maintenance of long-term employment practices.⁵ In these unfavourable economic conditions, the social agreement on employment became extremely vulnerable.

In the face of the oil shock, large companies opted to rationalise their business activities, which meant extensive cost-cutting measures (e.g. Kamiyo, 1995:420). According to a survey in 1979, personnel costs were the main item of cost saving and 80% of the companies that reduced personnel costs felt that “the measure brought the result they expected” (Aoyama, 1998:122). The measure was first applied to part-time and contract workers and women, but soon included regular, largely male, employees (ibid., Hyodo, 1997b:330-3; Kamiyo, 1995:448-9). A range of measures were adopted including voluntary retirement and, in the worst cases, the firing of specific workers. Extreme measures were avoided in most cases, however, and the majority of companies chose to overcome the situation by increasing the flexible deployment of workers (i.e. transfers to other locations and/or to their smaller subsidiaries) and adjusting their wage structures (Hiranuma, 1998:109; Kyotani, 1993:148).

Several case studies can illustrate the increased practice of transfers and the struggle of unions to maintain long-term employment. Hisamoto (1998: 152-9) has documented how one large textile company reduced its workforce by 3,000 in just over two years in the mid-1970s after 11 consultations in a year between management and the union. The union’s attitude was that “what needs to be defended, we defend, what we should collaborate on, we do”. The union accepted the reduction (the proposal was 4,000) while rejecting the call for voluntary retirement and lay-offs. It also agreed that the transfers would take account of workers’ willingness and preferences. However, when the situation worsened in 1977, the employer announced a further reduction of 14,500 workers over the following two years. At another textile company, both the

⁵ The GNP growth rate in 1974 was -0.2%, the first year of negative growth since the end of the war. Production in the steel industry declined by 20% as a result of the oil price shock (Kamiyo, 1995:419).

employer and the union approached the recession with a large-scale, company-wide transfer plan to save employment. However, when business performance did not improve, the union was eventually leave to accept voluntary retirements as a way to reduce personnel.

The case of a large steel company also shows the difficulty of that reaching a consensus between the employer and the union and how the union's demands can be compromised. In this company, the union had to accept a very small wage increase in 1977 in exchange for an agreement that the employer would not ask for voluntary retirement (Hyodo, 1997b:346). The economic climate then forced the union to accept the employer's further plans to reduce workers and the union chose to agree to an increase in personnel transfers as the only way to avoid lay-offs (ibid.). The increased practice of personnel transfers by this company is striking. Among five steel mills in different parts of the country, the proportion of workers who were transferred to other cities was as high as 57%, 30%, 73%, 24% and 56% in 1983 (Kamiyo, 1995:317). In other case, a large electronics company set up 27 subsidiaries during the 1970s, partly as outlets for the excess personnel of the parent company (Kyotani, 1993:148). The diminishing influence of unions on the matter of personnel transfers was also reported by the union of Hitachi Corporation between 1968 and 1982, when such transfers took less account of personal willingness (Goto, 1994:280).

Personnel transfers was further established as a way of both reducing and maintaining employment in the 1980s when micro-electronics were introduced to the production process.⁶ Older workers were again most severely affected by the situation (particularly in large companies). In Hitachi, 70% of those transferred to subsidiaries were in their late 50s (ibid.). Small and medium companies with close relations to a large company had to accept those who the large company could no longer afford to keep. A critic has noted that since it was not officially a lay-off, even the mass media did not take up the issue of transfers between large and smaller (Hiranuma, 1998:109).

⁶ The introduction of micro-electronics technology in Japan led to the adoption of numerical control machinery, computer-aided design, office automation and industrial robots. The effect of micro-electronics on employment was internationally feared, but a study based on a survey of 200 Japanese companies in 1980 concluded that despite the extensive adoption of micro-electronics, there was no large-scale reduction in employment and instead there was an increase in employment in those companies which adopted the technology (Hyodo, 1997b:332; Ministry of International Trade and Industry, 1980, in Kamiyo, 1995:445). It was an unusual case among OECD countries.

Nikkeiren, the employers' federation, dubbed this practice the 'Japanese system of lay-offs' at the time (ibid.). Even when they were spared from being transferred (or even after transfer), many older workers were subject to further personnel cost-saving measures such as no salary increase after the age of 50 or no promotion after the age of 45 (e.g. ibid.; Kumazawa, 1993).

For its part, the government initially responded in 1966 with legislation to ease the tension over employment security (*Koyo-taisaku-ho*). The legislation included the provision of living and training subsidies for those between jobs to ease their transition (MHLW, 2005). The limitations of the social agreement on employment must have been apparent to the government by the mid-1970s, however. It enacted legislation in 1978 to protect and stabilise employment in declining industries (*Tokutei-Sangyo-Kozo-Kaizen-Rinji-sochi-ho*) and passed laws in 1977 and 1978 to assist the re-employment of redundant workers (*Rishoku-sha-ho*) (Kamiyo, 1995:422).

Summary

The effort by both employers and unions to maintain long-term employment practices is worth acknowledging. The long-term dialogue between them contributed to the construction of trust and, to a great degree, facilitated loyalty and the dedication of workers to the company. However, it should also be acknowledged that, while it was intended as a measure to secure employment, the long-term employment system increasingly became a source of hardship for existing workers. There was no transparent and standard measure for the selection of workers for transfers and this must have fuelled mistrust and anxiety. A comparison of surveys on management practices in 1975 and 1980 indicated that the number of companies that required the union's agreement on personnel transfers (i.e. changing positions, temporary leaves, rationalisation of personnel) decreased over the five-year period (Hyodo, 1997b:338). To be sure, some of the hardcore unionists maintained a confrontational approach and fought against management proposals. However, many of them were increasingly forced out of the workplace as they became the subject of transfers or, if they resisted, lay-offs.⁷ Ordinary workers had to find ways to survive in this climate. In particular,

⁷ While the exclusion of these unionists was often carried out covertly on the basis of their incompetence,

older workers opted to compensate for their limited adaptability to new technologies with their dedication to work, which included long hours and a willingness to learn new skills on their own initiative (e.g. Kumazawa, 1997).

As companies began to adopt systematic performance appraisal in personnel management in the 1970s, even for younger employees, workers' willingness to learn became an important criteria for doing well in the workplace. The following section will explore the effect of the wage structure and the development of personnel appraisal on the shaping of the skill development system.

5.2 Incentives to learn: the development of the wage and appraisal system

The previous chapter examined the development of the wage system and how it accounted for both seniority and skills (or 'ability to perform') on the job. The development of this hybrid system reflected the diverse interests of stakeholders at the time. As new technologies changed the meaning of 'skilled worker', younger workers, who were more adaptable, demanded that the system should better reflect skill and performance, while older workers insisted on the importance of seniority. Unions had to respond to both demands. The increased weight of skills and performance in the wage structure once prompted unions to consider the adoption of so-called 'same labour (occupation)-same wage structure' across firms in a sector. However, this structure posed a threat to the dominance of enterprise-based unions and the idea was never taken up on a large scale (Hiranuma, 1998:105). As a result, the hybrid system allowed for a detailed structure for assessing workers' skills, including definitions, standards and assessment methods, that was determined at the company level.

While the discussion on the increased weight given to skills (and performance) in the payment structure began in the 1960s, the shaping of that structure occurred later, in the 1970-80s (e.g. Hyodo, 1997b:362-79). While enterprises struggled to save personnel costs without compromising productivity and quality, one of the main concerns of human resource managers was how to better recognise and utilise

some were conducted overtly and systematically. These companies included Mitsubishi Jushi, Toshiba-Fuchu and Hitachi. Some severe cases were raised in the Diet (Hiranuma, 1998:112-4).

individual workers' skills. Some companies established enterprise-based job qualification systems, which mapped out expected outcomes for skills, knowledge and performance in the company according to position and job grade (e.g. Koike, 1997:107). These systems are mainly divided into 'management skills/ability', 'supervisory skills' and 'operational skills' and workers were assigned to a specific grade in one of these categories (Hiranuma, 1998:107). The basic salary of regular workers was largely determined by the level of the grade and further differentiation was made on the basis of personnel appraisals. According to one study, the proportion of companies (with 300 or more employees) that introduced such qualification systems increased from 43% in the early 1960s to 63% in the early 1980s. Among large companies, the proportion reached 84% and all the remaining companies were also planning to introduce similar systems (Kamiyo, 1995:471).⁸

Koike provides an example of a qualification system used in 1994 for the assessment of assembly workers in a large automobile company (Koike 1997:107).

- P1 n.a.
- P2 1) able to perform one-third of positions within the floor
- P3 1) able to perform two-thirds of positions within the floor
 - 2) can be a leader of a small group
 - 3) able to handle simple problems
- P4 1) able to perform almost all positions within the floor and able to teach about some of the positions
 - 2) able to do problem-solving
- P5a 1) able to teach others about all the positions
 - 2) can be a leader regarding the quality of (the jobs on) the floor and productivity improvement
- P5b 1) able to handle positions within the neighbouring floors
 - 2) able to suggest better ways when new lines are introduced
- P6 Vice-foreman (*Fuku-hancho*)
- P7 Foreman

⁸ A 1987 survey by Nikkeiren, the employers' federation, showed a similar result. 99 out of 105 companies (with 1,000-3,000 employees) introduced such qualification systems. 48 companies did so after 1975 and a further 50 companies after 1980 (Hyodo, 1997b:366).

P8 Foreman

Kumazawa (1997:51) presents typical levels used for the assessment of white-collar workers:

- (1) able to perform standard operations according to orders
- (2) able to do some of these operations flexibly
- (3) obtain job-related specialised knowledge (e.g. acquisition of a license such as management accounts, tax related work, assessment of real estate, travel business, social insurance work).
- (4) enhance leadership and negotiation skills
- (5) able to plan new areas of work and areas of improvement
- (6) interested in the perspective of the whole company and the profit at the whole company level

Appraisals assessed the quality and quantity of work, innovation, leadership and the training of subordinates. In addition, the skills aspect involved assessing knowledge, planning, ability to identify and bring together strengths of different components, judgement and leadership. Attitude and motivation appraisal included discipline, ability to work with others, proactive attitudes and a sense of responsibility (Hiranuma, 1998:106-7). Kumazawa (1997:52) adds that although they were not necessarily listed as criteria for appraisal, the attitudes that were indicative of 'putting the work first' were highly important for climbing the company hierarchy. The outcome of appraisals influenced not only annual increments but also the level of job grades and work assignments (e.g. Koike, 1997:102-4).

The most common payment structure among large companies in the 1970s combined seniority (i.e. age and length of service) with job-related elements (Hiranuma, 1998:107-8). These job-related elements took account of: the nature and difficulty of the job; performance in terms of job quality and quantity; and the level of skills (or ability to perform the job). Although seniority remained an important element of wage determination, the proportion of the wage determined by non-seniority elements gradually increased over time (ibid:107-8; Aoyama, 1998:143; Hyodo, 1997b:366). In the case of one large steel company, Shin Nittetsu, the relative proportions of seniority versus job-related aspects of the wage increased from 40:60

prior to 1980 to 50:50 in 1980, and then to 40:60 in 1987 (Hyodo, 1997b:376).

5.2.1 Assessment of non-technical elements of skills: Implications for working and learning

The examples above demonstrate that, besides technical skills, such elements as attitudes, generic skills and other personal qualities were subject to the performance appraisal. It is important to note that the term 'skills' in the Japanese workplace included not only technical and specialised skills but also these soft skills that facilitate the application of technical skills, as well as motivation and attitudes including being flexible/adaptable (Ishida, 1990, Nikkeiren, 1969 in Kumazawa, 1997:46, 58). The importance placed on non-technical aspects of one's qualities also meant that the appraisal took account of one's potential for further learning and better job performance (e.g. Inui, 1990). Therefore, a broader term 'ability to perform the job' (*Shokumu suiko nouryoku*) is used in the Japanese workplace to describe so-called 'skills'. While the consolidation of long-term employment practices might have contributed to workers' emotional attachment to their companies and their willingness to learn to do a good job, the new appraisal system provided structural support to further encourage such attitudes.

The importance placed on non-technical aspects of workers' skills and attitudes was not coincidental. Long-term employment practices require workers to have particular kinds of skills. In a context where a large number of workers stay in the same company for a long time, adaptability, ability to work with others and the capacity to learn from each other have particular importance (Inui, 1990). Given the flexibility and fluidity in job assignments, these skills were valued as equal to, if not more than, technical skills (e.g. Kumazawa, 1997:39-40). Secondly, the increased practice of flexible deployment of the workforce and other efforts to increase productivity favoured, or heavily relied on, workers' cooperative and sympathetic attitudes towards the company's policies (ibid.) and this influenced the nature of the appraisal system.

The problem with the emphasis on non-technical aspects was the system's vulnerability to arbitrary uses. There were no nationally-agreed, or even industry-

agreed, definitions, standards or assessment methods of skills required for particular jobs, as these were determined at the company level. While this practice allowed individual companies to customise their systems, it was detrimental to the transparency (e.g. Hiranuma, 1998:107) and comparability of different company systems and thus reduced the transferability of skills obtained in the workplace across companies. Older workers who struggled to cope with new technologies might have benefited from an appraisal system that appreciated their dedication and efforts to learn. On the other hand, traditional labour unionists and those who were not supportive of management's policies were undermined on the basis of their incompetence (ibid.:110-2, 129). Critics state that personnel appraisal systems became systems of selection and transformed many workers into 'company men' who would accept any management decision and turn a blind eye to the management's abuse of workers who opposed their decisions (e.g. Aoyama, 1998:145).

At the same time, it might be a narrow view to suggest that severe competition and a fearful work environment were the only forces driving workers to work hard. A survey by a group of private sector unions in 1968 showed the increased dependency and appreciation of workers toward their companies (Goto, 1994). About half of the respondents expressed the view that 'they were managing (financially) thanks to the company and wished that the company kept doing well'. Another 20% felt that 'although they were not satisfied with the company, they could not afford to leave' (ibid.). The proportion of negative responses was low. The percentage of respondents who agreed with the view that, 'I don't owe anything to the company, I just work and they pay for it', or 'I hate the company and would leave if I had a better alternative', was 15.2% and 6.8%, respectively. In fact, not many Japanese workers would agree that they are forced to work hard (Kumazawa, 1993). Kumazawa has highlighted that personnel appraisal systems were designed to facilitate a situation in which workers did not have any choice but to work hard. One of the methods used for such appraisal was to assess one's performance according to targets determined by workers themselves. In this system, workers set their annual targets (including job performance and skill development plans) in consultation with their supervisors and this provided criteria for their personnel appraisal. The main role of the supervisors was to negotiate with the

workers to set the targets slightly higher than their original proposals (Kumazawa, 1993:68-9). Once the workers agreed, they became responsible for achieving them and, as a result, they had to try hard to achieve those targets (ibid.).⁹ By doing so, the targets were mutually agreed, not imposed, and workers felt partly responsible for achieving them. Kumazawa noted that such systems were effective in making workers work hard without making them feel that they were forced to work.

The above analysis suggests that the increased practice of informal OJT based on workers' willingness to learn (and train) and the situation that 'workers take learning as part of their jobs' needs to be understood in relation to the development of human resource management systems in the 1970-80s. A survey by the Japan Industrial Training Association (NSKK), which examined the changing focus of HRD efforts, indicated that workers were increasingly becoming proactive in their learning activities (NSKK, 1971:424). The survey showed the increased importance of self-study (from below 20% in 1965 to above 40% in 1970 and above 50% in 1975) and of OJT (from above 30% in 1965 to above 50% in 1970 and 1975). An analysis of the trends in education and training after 1965 highlighted the increased use of case studies, report writing, homework and debates rather than lecture-type training. This signalled a shift from lecture-based training to learner-centred training (ibid.). The practice of quality circles (QCs) was initially adopted to alleviate a sense of isolation (due partly to the diffusion of automation) and facilitating workers' active participation in the production process. However, despite such intention, the practice soon became additional work (and a source of competition) for workers as the participation and contribution also became a subject for the appraisal. According to a survey in 1982, the average number of suggestions was 14.2 per year (Kamiyo, 1995:379).

The skill development system which centred on OJT and self-study was largely the result of the diffusion of long-term employment practices and the seniority-based wage structure, which for Japanese unions had fought for many years. However, the focus on these two elements under the harsh economic climate of the 1970s-80s ironically led to the development of severely tight human management practices by

⁹ Kumazawa (1993) suggests that workers' behaviour was the result of both the company's tactics and workers' responsiveness to the company's demands. He called this Japanese style of human management, 'the mechanism of force and voluntary'.

employers, as mentioned. The inability of the unions to rectify the situation was severely criticised and some critics mentioned that the enterprise-based structure was to blame (e.g. Hiranuma, 1998). On the other hand, for employees of large companies it was possible that their willingness to learn was also motivated by their professionalism and their pride to work for a large company. As indicated earlier, many workers, both white- and blue-collar, aspired to achieve middle-class status after decades of economic hardship. Working for a large company provided them with such prospects (Goto, 1994). The formation of the enterprise-centred skill development system reflected the evolution of the employment and wage systems that were shaped by these diverse interests of the stakeholders at the time.

5.3 Coordination between education and work: an unintended consequence of the democratisation of education

The chapter has so far examined the process by which enterprises came to play an increasingly central role in skill development. We now turn to the role of the education system in shaping the system. In the previous chapter, I discussed the movement for democratising the education system after the war and the strong leadership of the teachers' union (Nikkyoso) in guarding education from business and national economic interests. The unions succeeded to a great extent in achieving equal opportunity in education. There was a considerable degree of autonomy in education and this prevented an explicit coordination between education and work; in the sense of manpower planning. However, the nature of education-work relations began to change in the mid-1960s. This was partly due to changing economic conditions, but it was also related to the unintended consequences brought on by increased access to post-secondary education. While the evolution of the employment and payment systems significantly contributed to the formation of the enterprise-centred skill development system, its formation was further enhanced by the changing relation between education and work.

5.3.1 Labour shortage and increased progression to post-compulsory education

How has the nature of the education system influenced the formation of the skill development system? The first important point is the link between the labour shortages and the increased progression to high school in the 1960s. As discussed, the labour shortage prompted many companies to enhance the enterprise-centred skill development system; they met new skill needs by training existing workers. The largest contributor to the labour shortage was the rapid increase in the progression to high school (Sumiya and Koga, 1978:201). The progression rate began to surge around 1957, increasing from just over half (51.5%) in 1955 to over 70% by 1965 (ibid.:205). Meanwhile, the labour shortage reached high levels. Of new vacancies, 19-23% were unfilled in manufacturing, 26-31% in repair work and 30-35% in construction between 1961 and 1965 (NSKK, 1971:385). The shortage was most acute in the recruitment of younger workers who were regarded as less expensive yet more adaptable for new technologies; there was excess labour among older workers.

This increased progression to high school was closely related to the success of democratising education. As noted, Nikkyoso and parents played a prominent role in running a nation-wide campaign to increase access to high school. As shown in Table 5.1, the percentage of young people progressing on to high school increased from just under 58% in 1960 to over 90% in 1975. While the government wanted to increase such access by expanding vocational education and training routes only, the campaign demanded access to all kinds of high schools. As a result, many children progressed onto the normal academic, rather than the technical, route. (On the positive side, however, this meant that the education system had succeeded in raising the general education level of the population, which increased the trainability of employees. As mentioned previously, this has allowed companies to provide uniform training and to expect similar results from that training. The high trainability of the majority of employees makes it possible to rotate employees among different positions and to expect them to learn quickly in their new jobs.)

Table 5.1 Progression rate to upper secondary school, 1960-75, Japan

Year	Total	Male	Female
1960	57.7	59.6	55.9
1961	62.3	63.8	60.7
1962	64.0	65.5	62.5
1963	66.8	68.4	65.1
1964	69.3	70.6	67.9
1965	70.7	71.7	69.6
1966	72.3	73.5	71.2
1967	74.5	75.3	73.7
1968	76.8	77.0	76.5
1969	79.4	79.2	79.5
1970	82.1	81.6	82.7
1971	85.0	84.1	85.9
1972	87.2	86.2	88.2
1973	89.4	88.3	90.6
1974	90.8	89.7	91.9
1975	91.9	91.0	93.0

Source: *Statistical Abstract of Education, Science Sports and Culture*, 1997 edition (Tokyo: Ministry of Education, Science Sports and Culture). p. 29

The success of the movement was also indicative of the increased autonomy of education from the interests of business and the national economy. Despite a number of demands voiced by industry, and the government's attempts to reflect such demands in the education system, the shortage could not be overcome. For example, in 1963 the government announced an estimated shortage of 170,000 scientists and engineers and 440,000 technicians from the levels needed to achieve a national plan to double the income of the population (NSKK, 1971:382). The inability to overcome the shortage may have been related to the sheer size of the demand; however it was also linked to the tension between education and work. The responsiveness of the education system in meeting the needs of the economy was thus weak. One of the labour market outcomes of this development was that the formal education system was relatively ineffective in producing a technically trained workforce. The situation provided another reason, apart from a company's own need to retain and train existing employees, for the development of the enterprise-centred skills system. Progress to reduce the shortage was slow and prompted the government to take further measures to promote technical education and training.

The situation led to the passing of the Vocational Training Law (*Shokugyo-kunren-ho*) in 1958, which allowed the establishment of colleges and high schools by

enterprises (ibid.:388). Some of these enterprise-owned schools (*Sharitsu Gakko*) existed long before the Act, including schools by Hitachi (1911) and Komatsu Seisakusho (1917) (ibid.:388). However, the law prompted more companies, including Toyota (1962) and Matsushita-Panasonic (1961), to establish such schools to overcome their skill shortages (Sumiya and Koga, 1978:220-5). A survey by Nikkeiren, the employers' federation, shows that 20 such enterprise-owned schools and colleges were established between 1960 and 1962 alone, whereas 18 had been established over the previous decade (1950-59) (NSKK, 1971:389). Thus, the provision of technical education and training for workers came to rely more on enterprises. However, as most of these schools targeted junior high school graduates, the general increase in the progression to high schools (in particular to academic high schools) led, as a result, to a reduced demand for these enterprise-owned schools and colleges from the mid-1960s (ibid.:220-5, 231-5). The focus of the training effort began to shift to those with at least a high school education.

As the enterprise-based skill development system was consolidated, the government began to focus its efforts on retraining in public vocational training centres and on the provision of material assistance (i.e. subsidies) to companies. The Vocational Training Law in 1973 and 1978 reflected this re-focusing (Chalmers, 1994).

5.3.2 Unintended coordination

While the government's attempt to expand VET at the high school level was a response to industry demands (Chapter 4), the increased progression to high school itself, in particular along the academic route, does not seem to have been a major problem for large companies. The skill development system began to feature a clear demarcation of responsibilities in which the formal education system focused on equipping young people with high general skills while companies trained them on more specific technical skills. By the mid-1960s, these companies had developed a solid base for enterprise-centred skill development and, with new technologies and flexible work practice, companies began to prefer recruiting younger workers with high adaptability and sound and broad general skills which were seen to yield higher learning capacities.

The enterprises' increased preference to recruit high school graduates also encouraged parents to demand increased access to high school (Inui, 1990). The combination of the rapid increase in high school progression and the advancement of technology led many large companies to begin recruiting high school graduates for the positions that were previously filled by junior high school graduates. The ratio between junior high school graduates and high school graduates among new blue-collar workers changed from 77:20 in 1959, 68:32 in 1965, and 33:67 in 1975 (Sumiya and Koga, 1978:207). Toyota, for example, substantially increased the intake of high school graduates from 1962 (*ibid.*:220-5). As mentioned, Hitachi had its own training school which trained junior high school graduates, but due to the rapid decline in applications from junior high school graduates around 1965, it shifted to training high school graduates from 1967 (*ibid.*: 231-5).

The increased progression by students and the industry's increased demand for high school graduates indicates that the interests of students/parents and companies gradually coincided. Inui (1990) argues that the assessment of skills/ability in enterprises which divided and ranked workers by a monolithic measure (not by diversified measures for different occupations) has reflected the way the education system was shaped. Students were ranked according to their grades at school and schools and universities were ranked according to the degree of difficulty (in terms of competition) for entry. As a result of achieving equal opportunity in education, children had to compete on the same basis and be assessed in the same way, while the only way to differentiate them was by grades (which were presumed to reflect the amount of effort). Kumazawa (1993) also points out that while education became egalitarian, the corporate structure did not and the hierarchical structure in the enterprise required students to be ranked. The structure of enterprises in Japan had a hierarchical and dual structure of large and small-medium companies. Many people preferred to work for large companies which offered better prospects for stable employment and better status. One study indicates that those with higher grades or those who graduated from high-ranking schools and universities increasingly had a better chance to gain employment in large companies (Kumazawa, 1993). This led to a diffusion of the recruitment practice that job seekers (largely fresh graduates) apply to a

company and not for a specific job (Shiomi, 1994:303).

Kumazawa (1993) states that the increase in high school progression was the main success of the democratisation of education, which in principle allowed all children, regardless of class, to gain access education as high as they wished. However, when almost all students progressed onto high school, the education system became yet again another stage in the selection process (ibid.; Inui, 1990). Although it was unintentional, coordination between education and work was gradually achieved and the autonomy of education was substantially curtailed in this regard.

Conclusion

The chapter examined the process by which the institutions that evolved in the early decades of the post-war period shaped the subsequent formation of the enterprise-centred skill development system between the 1960s and the 1980s. As discussed, such institutions included long-term employment, the hybrid wage structure and the autonomy of education, and the first two institutions in particular became *de facto* social agreements/contracts on employment when they were settled by the early 1960s.

The analysis demonstrated that these social agreements provided the basic framework for the subsequent behaviour of tripartite actors on matters related to employment and work. The formation of the enterprise-centred skill development system was not the result of intentional action at the beginning. The analysis indicated that it began, rather, as a by-product of the efforts of both employers and labour unions to keep the social agreements on employment as they responded to the productivity and technological challenges of the 1960s. The technological innovations of the 1960s increased skills demands; however the agreement on securing employment led most employers to respond by developing the skills of their existing workers.

The social agreements continued to provide the basic framework on employment and related matters throughout the 1970s and 1980s. However, the analysis showed that the effort to maintain the agreements in the light of the advancement of technology and the economic challenges of the 1970-80s led to several unintended consequences. The effort, in part, led the original agreements to be

substantially modified. While it was not intended, such efforts also led to the development of tight personnel management practices, which in effect facilitated workers to participate more in learning and even to take skill development as part of their jobs.

The autonomy of education, achieved as a result of the post-war democratisation of education, also took an unexpected turn. This democratisation had succeeded in bringing egalitarianism to the education system. However, when 70% of young people began to have at least a high school education (in particular, following the academic route) by the mid-1960s, the system began to rank students by grades, schools and universities. The general pattern of the school-work transition emerged as a result, in which students ranked within the education system were increasingly channelled into enterprises ranked by size and prestige. When the education system turned out to be another system of selection for industry, its autonomy was increasingly compromised. As the education system focused on increasing progression, particularly to academic high schools, the provision of vocational education and training further became the responsibility of industry.

The formation of the enterprise-centred skill development system provided the main source of competitiveness particularly demonstrated by the strong performance of large manufacturing companies in the 1980s. Continuous improvement, zero defects and increased efficiency were sought to the maximum level, which led to the birth of the well-known Japanese production system, characterised by 'lean production' and the Just-In-Time system in the automotive and other industries. This chapter demonstrated that such impressive performance was closely related to the historical evolution of interactions between social partners and the skill development system that resulted. The next chapter examines further the evolution of, and the prospects for, the skill development system in the 1990s and beyond.

Chapter 6 New social values, diversified employment and an evolving skills system (1990s and beyond)

By the beginning of the 1990s, Japan had gained the status of an economic superpower in the global economy. The high level of skills acquisition and full utilisation of the workforce, together with innovations in the production system, were regarded as the main contributors to its success. The previous chapter discussed how this high skills level, created through the skill development system, was an outcome of post-war industrial negotiation, which included efforts to maintain the social agreement on employment protection and the tightening of personnel management that followed from an attempt to overcome economic shortfalls while protecting employment in the 1970-1980s. The previous chapter also discussed how such a balancing act was difficult and how it drove a considerable majority of workers to place work before their personal lives in return for long-term employment and career progression within their companies.

This system was further challenged and modified in the 1990s. The changes were partly due to the greater economic difficulties that enterprises faced following the so-called 'bursting of the bubble economy' in the early 1990s. However, it was also influenced by growing interest among the stakeholders to rectify the malaise of industrial society created in post-war Japan, where enterprise interests were excessively emphasised at the cost of workers' personal lives. Individual workers began to seek a better quality of life and greater individuality in their careers, rather than the fulfilment of material well-being. The government, employers and unions also questioned the pattern of work life that they had built and supported over the years and they began to stress the importance of individuality and diversity in work and private life. It was a

fundamental shift in the interests that had supported the social convention regarding long-term employment, work and education.

At the same time, employers were further driven to reform the existing employment and management systems as they faced the severest economic recession of the post-war period. Indeed, these systems, notably long-term employment, grew out of specific economic conditions and tripartite relations of the 1950s and 1960s, including labour shortages and a relatively stronger bargaining position of labour. As those conditions changed, however, the benefits of long-term employment for employers related to the increasingly limited number of core regular employees, and not to *all* regular employees like before. The depth of the recession was such that by the mid-1990s not only the competitive strategy but also most existing institutions, such as those supporting the employment, management and education systems, were being questioned. The reform of the education system was also prompted by growing social problems at Japanese schools.

The irony, however, was that the attempt to rectify the malaise of industrial society met conveniently with the interests of employers in trying to overcome the economic recession. While the greater emphasis on diversity and individuality was generally accepted as desirable for society, it ironically provided a rationale for employers to adopt more diversified employment practices based on different types of workers (e.g. core, specialised, contract/part-time). It was argued that such diversification would support diversified career paths as desired by workers, even though the new practice meant that long-term employment was to become a privilege of the few. Meritocracy was reinforced, so it was argued, to reflect individual differences and merit.

A shift in the interests of labour unions also played an important part in the changes. The 1990s witnessed a major attempt by the reformist factions of the labour unions, in particular at the national level, to renew themselves. The strategy chosen was to form a closer alliance with employers rather than remaining their opponents. In the face of the prolonged recession, however, the alliance with employers severely limited unions' ability to influence the modifications made by employers to existing employment practises (Hyodo, 1997b:ch.7). A diversified or polarised pattern of

employment and school-to-work transition began to emerge as a result. The enterprise-centred features of the skill development system still remain. However, the skill development system increasingly reflects the current diversified, or polarised, structures of the employment and education systems.

This chapter analyses the evolution of the enterprise-centred skill development system in the 1990s and beyond. The analysis will show that the major skills institutions, such as the employment and education systems, were reshaped by the changing interests of the stakeholders as they attempted to adapt and reinvent themselves to meet their own separate challenges in the 1990s. However, the shaping of these institutions was not an outcome of negotiations between conflicting interests as in the 1960s-80s. As each stakeholder attempted to address its own challenges, their interests converged to some extent, in a sense that they all accepted the need to modify the existing systems. This convergence of interests provided a rationale for reforming the employment and management systems further in the 1990s. However, there was no new social consensus in terms of how and to what extent the systems should be reformed. When the economic situation worsened in the mid to late 1990s, it allowed greater discretion to employers in undertaking reforms in employment and management systems, with little influence by the other stakeholders, notably unions. Despite attempts to renew themselves to stay relevant, the discourse taken by the unions ironically made it difficult for them to act as an effective opposition. The shaping of the skills development system reflected such dynamics.

6.1 Reflections on Japan as an 'industrial society': Undercurrents for greater change in institutions and the skills development system

Both employers and unions made efforts to maintain the practice of long-term employment. It is also clear that the benefits arising from the practice were well recognised by both parties since it not only provided workers with stable employment prospects, but also allowed employers to follow long-term business strategies including the skill development of the workforce. However, the effort to maintain the long-term employment system also became a source of hardship for employees. As discussed in

the previous chapter, while lay-offs were avoided at all cost, the economic challenges led employers to reduce personnel costs without compromising the quality and quantity of work, and this gave greater discretion to employers in developing very tight management practices. The new practises were effective in facilitating workers' willingness to learn, to utilise their skills and to work hard, often excessively. By the end of the 1980s, it was apparent that the existing employment and work practices had transformed many workers into 'company men'¹ and drove them to work long hours. It was around this time that the term '*Ka-rou-shi*' was invented to describe 'death due to excessive working'. It was an unintended, unfortunate consequence of the effort to maintain the social agreement on employment while being economically competitive. It indicated the limitations of the existing employment practice.

The early 1990s witnessed increased interest in rectifying the excessive emphasis placed on enterprise competitiveness and growth, and in achieving a better balance between work and private life (Hyodo, 1997b). It was also a reflection of the bursting of the bubble economy and a number of the financial scandals that followed. These incidents were also regarded as having negative consequences by putting excessive pressure on workers to contribute to enterprise profits.

An interest in rectifying the malaise of industrial society was voiced from across practically the entire political spectrum. Hyodo (1997b) shows that those concerned included the government, employers and unions, as well as the general public. The recommendations of the Committee on Industrial Structure in 1990, reporting to the Ministry of International Trade and Industry (MITI), questioned: 'have we (Japanese) really become wealthy?', and called for rectifying the existing enterprise-centred society in which 'production' is placed before 'private life'. In 1992, the five-year plan for the development of a 'private life-centred superpower' (*seikatsu taikoku*) stressed the need to rectify the existing situation in which the logic and behaviour of enterprises were causing serious problems in private life. A similar concern was also expressed by enterprises and employer associations. In 1992, the CEO of one of the leading multinational electronics companies (Mr. Morita, Sony

¹ Long-term employment has generally been limited to full-time, regular male workers. One of the reasons provided is that a large number of female workers leave their jobs in the middle of their careers for child rearing (JIL, 1996:32).

Corporation) published an article in which he indicated his alarm that there was a tendency for enterprises to ask too much of their employees, shareholders and associated companies, as enterprises focused too much on increasing competitiveness (Hyodo, 1997b). Statements by the Japanese Committee for Economic Development (*Keizai Doyu Kai*²) also posed questions with regards to the imbalance between enterprises (work) and private life. The labour unions also echoed these statements. The Japanese Trade Union Confederation (*Rengo*), the largest labour union in Japan, which was founded in 1989 as a result of the amalgamation of most of the private and public unions, called for the transformation from an 'industry first' society to a 'private-life first' society. It stressed the importance of achieving a better balance between work, family and community life.

Public opinion surveys regarding the views toward work suggested that the interest of the general public began to shift away from the fulfilment of material well-being. The analysis of various surveys by Hyodo (1997b:408-09) revealed significant changes in personal attitudes. For example, in the period between 1979 and 1990, the proportion of respondents who claimed to belong to the middle or upper-middle class declined and those who said they belonged to the lower-middle class increased. Despite this, however, the proportion of respondents who wished to improve their material well-being declined by nearly 10% and instead those who wished to improve their mental/inner well-being increased by 12%. Those who wished to improve their material well-being reached as high as 40% by the late 1970s. However, those who wished to improve their mental/inner well-being and have more free time (*yutori*) increased from 35% in the 1980s to 53% by 1990. Respondents expressed their strong desire to find and pursue meaningful lives and careers. Hyodo also cites a survey which indicated that a considerable number of women preferred to have part-time or temporary work, as opposed to regular full-time work, since the former allowed them to work flexible hours. In addition, an increased number of workers placed more importance on having a job to which they could apply their ability and skills, rather than improving their status within the company.

² One of the leading business/employers associations, along with *Nikkeiren* (Japanese Federation of Employers' Associations).

These reflections on industrial society also extended to the sphere of education. Since the early 1990s, there have been growing social problems at Japanese schools, notably increased delinquency in the classroom, school violence, absenteeism, bullying and in the worst cases, suicides. These problems at schools were repeatedly reported in the media, and, by the mid-1990s, the issue amounted to one of the most serious educational and social problems in the country. The success of the democratisation of education dramatically increased the level of educational attainment among young people, and by the early 1990s, a post-compulsory high school diploma was almost a minimum qualification for a young person to obtain a decent job. However, as the general education level increased, students were increasingly ranked by grades, schools and universities. As students from high-ranking universities began to have the best prospects for obtaining jobs with prestigious companies, the system became a highly competitive exam-centred system, which drove students to compete fiercely with each other. While the contribution of such a system to the skills development of the workforce was considerable, the standardised and competitive system was increasingly being blamed as the cause of social problems. In this light, the existing education system was also seen to have reached its limit, in a similar way as the employment system.

As discussed later, this educational crisis made some teachers think twice about encouraging students to work hard (Green *et. al.*, 1998). The 1990s was also to witness an increase in the number of young people who chose not to follow the existing pattern of the school-to-work transition. The proportion of those who are not in employment, education or training (NEET) increased considerably during the decade (Table 6.1).

Thus, the 1990s began with a major (society-wide) revision of the way people lived, worked and studied. This revision had two major implications for the existing institutional arrangements. First, individual workers' interests were no longer monolithic and were not focused only on the maintenance of long-term employment. This meant that unions could no longer assume that fighting for employment would meet the needs of (most) members. Some of the unions even began to support greater diversity in work life and stressed the importance of providing training and employment opportunities (within the company) to support this work style (Hyodo,

Table 6.1: Youth not in employment, education or training, by age group, Japan, 1993-2004

Age group Year	15-19	20-24	25-29	30-34	Total (15-34)
1993	80,000	130,000	100,000	90,000	400,000
1994	80,000	120,000	110,000	110,000	420,000
1995	90,000	130,000	120,000	110,000	450,000
1996	90,000	120,000	100,000	90,000	400,000
1997	90,000	120,000	110,000	100,000	420,000
1998	90,000	130,000	130,000	110,000	460,000
1999	90,000	150,000	130,000	110,000	480,000
2000	90,000	120,000	130,000	100,000	440,000
2001	80,000	130,000	150,000	130,000	490,000
2002	120,000	170,000	180,000	170,000	640,000
2003	110,000	160,000	180,000	180,000	640,000
2004	100,000	180,000	190,000	180,000	640,000

Source: MHLW (2005b: 301)

1997b:534). In this sense, the greater emphasis on diversified work life somewhat diffused adherence to the existing social agreement on employment. The second implication was that the revision resulted in a general societal mood change that was supportive of, or at least accepted, a balance between work and private life, that was characterised by greater diversity and individuality. (This development, however, was to take an unexpected turn, as discussed below.)

6.2 Economic challenge of the 1990s: Further pressure to reform the existing systems

In the 1990s, the relentless economic pressure, amplified by globalisation and the rapid advancement of technology, created a general perception that Japan had reached the limits of economic growth based on the existing competitive strategy of maximising efficiency and quality in large-scale manufacturing. While efficiency and quality were continuously sought (in particular with ever tighter personnel management), there was increased awareness that a new strategy was needed to maintain and reinvent the country's competitiveness (Sakamoto *et. al.*, 1998). There was much debate regarding the need for a paradigm shift from the traditional 'catch up' strategy to a new

'innovation' strategy based on Japan's own inventions and discoveries (ibid.; Green, 2001). Many large manufacturing companies had been innovative in the production system and in manufacturing goods by modifying, perfecting and raising the quality of existing products. However, the deepening of the economic crisis urged them to shift from 'how to make' to 'what to make'. It was commonly argued that innovation was the only way forward to survive in the already crowded global marketplace. This would allow Japan, so it was argued, to capture new market opportunities. Increased attention was also placed on venture business as a potential source of Japan's next sunrise industries and a new source of employment (ibid.).

The Asian financial crisis of 1997 added further momentum to the reform initiatives. The crisis hit Japan as it was finally seeing signs of recovery from the earlier recession (Dore, 1998:774). As Japan's trade with the Asian region accounted for almost 40 percent of its total trade, the succession of sharp falls in Asian currencies and share prices in 1997 was too great for some Japanese companies to cope with (Green, 2001:113). From the mid-1990s, redundancies have featured more frequently in Japan (e.g. Nissan, 1993). Being concerned with the effects of such lay-offs on worker morale, *Keidanren* (an influential business consortium in Japan) made public statements indicating that redundancy should be the last measure taken by companies to overcome their financial difficulties (Sakamoto *et al.*, 1998:32). However, the Asian crisis left a number of companies with no choice but to break with this social convention. The unemployment rate worsened and reached record highs of 4.8% in March 1998 and 5.2% in November 2003 (although the situation has improved with the rate falling to 4.5% in March 2005). The crisis instigated further and greater reforms of the economy, which included major financial sector reforms and the break-up of some of the unique Japanese business arrangements such as *Keiretsu* (large business conglomerates) and mutual shareholding. The moves prompted questions about whether the Japanese economy was becoming more similar to the Anglo-American model, which is largely driven by short-termism (Dore, 2000; Green, 2001:116).

Proposals for a new competitiveness strategy –based on high value-added production, new product development and venture business– indicated a change in the skills required by enterprises. Greater emphasis was placed on new skills and talents

such as creativity, autonomy, risk-taking, as well as specialised professional skills. This presented a marked shift from general learning skills, team-working skills and flexible and multi-tasking skills, which had been the backbone of Japanese competitiveness in the past. Many employers found that their workers were very proficient at following blueprints or other instructions but that without such guidance they had difficulty knowing what to do (NIRA, 1994). It was argued that this problem had its roots in the education system where students were trained to give maximum effort under pre-set conditions.³ As discussed in the previous chapter, the education system had been in tune –albeit unintentionally– with the needs of business by turning out young people equipped with strong general skills and team-working ability. However, as a new approach to achieving competitiveness was sought, the education system became a subject of criticism.

The scale of the economic crisis was such that as Japan attempted to reinvent its competitiveness, it began to question practically all of the institutions and systems that it had built and which had supported its post-war economic growth. The existing employment and management systems, as well as the education system, were reviewed critically in this light. This encouraged enterprises to introduce further reforms to their personnel and skill strategies, even though this meant significantly modifying the existing framework.

6.3 Ironic convergence of interests on individuality and diversity and its impact on existing institutions

The framework for adjustments to the existing employment and personnel management systems was already in the making by the mid-1990s. In a report in 1992, Nikkeiren, the employers' federation, noted that support for the existing employment practice was still firm, although it introduced the prospect of a two-tier personnel strategy (flow-type and stock-type) (Hyodo, 1997b:508). However, the emphasis shifted in the light of increased economic pressure by the mid-1990s. While acknowledging the importance of long-term employment, Nikkeiren's view on the 'new Japanese-style management

³ Interview with Yoshiyuki Kudomi, Hitotsubashi University, Tokyo, 1998, in Sakamoto *et al.*, 1998.

system' presented in 1995 called for diversified employment practices, greater emphasis on individual merit and performance and greater labour mobility (by arguing that enterprises should respond flexibly to the diversified and individualised needs/aspirations of workers) (Nikkeiren, 1995). As examples of diversified employment practices, it suggested three types: long-term employment for core administrative and technical workers; contract-based employment for highly specialised workers; and flexible employment for those engaged in routine administrative and technical or specialised work (ibid.; Nippon Keidanren, 2005). This model, expressed by the employers' organisation, suggests that the benefits of long-term employment for employers have been reassessed. While the benefits continue to be felt by employers, they are limited to core workers and not to all types of employees as previously. As discussed below, while the principle of long-term employment continues to be accepted by the majority of the companies, this diversified model of employment practice has gradually penetrated into the majority of workplaces. Excess labour and the weak union influence (as discussed later) were contributing factors of this development.

What needs to be noted here is that workers' aspirations for greater individuality and diversity in work life conveniently met the needs of employers to diversify employment practices. It implied that employers' commitment to long-term employment was reduced and would apply to fewer core workers. Criticism of this new vision of the employment system was bitter. It highlighted that the importance of enhancing economic competitiveness was stressed even more in the name of maintaining stable employment and improved quality of life, even though the reality of the diversified employment practice and further emphasis on individual merit meant further reductions in the number of long-term workers and in personnel costs (Makino, 1998:41). It also highlighted that while diversification of employment practice was promoted, the level of unemployment and unstable employment was increasing (ibid.:42).

6.3.1 Impact on the existing institution (1): Continuity and change in employment practice

This diversified employment practice was gradually diffused at the enterprise level, in particular among large companies. One large electronics company adopted a two-tier employment system in the mid-1990s by which the company divided employees into two categories: those who were employed with a long-term prospect of eventually becoming 'core-personnel' and those who were employed with short-term prospects to meet immediate needs (so-called 'flow-personnel') (Sakamoto *et al.*, 1998). Flow-personnel were employed for production and clerical positions in the company (*ibid.*). The proportion of such short-term contract or part-time staff was then reaching up to 20 per cent.

Diversified employment practices were also reflected in aggregate data, which indicated the concurrence of the old practice of long-term employment with the new trend in short-term employment. In other words, the picture suggests a mixed (or diversified) strategy for employment: continued long-term employment for fewer core workers combined with an increased number of workers employed with short-term employment prospects. On the one hand, there was a clear indication of the continued commitment to long-term employment by companies. According to a 1999 survey by the Japan Institute of Labour, which investigated large companies' views on 'Business strategies, corporate governance and personnel strategies for the new century', 33% of respondents indicated that they would continue the practice as a matter of principle and 44.3% said that they would continue but with some modifications. This suggests that altogether nearly 80% of large companies expected to maintain the long-term employment practice, albeit with some modifications. Only 17% of them said that they would need to review the practice fundamentally (JIL, 2000:17). Other studies on attitudes towards (personnel) restructuring also indicated that approximately 60% of respondents across industries claimed that they would maintain long-term employment as much as possible (MOL 1999:246; EPA, 1999). While many ways existed to cope with business shortfalls, 44% of small and medium enterprises and 49% of large

companies said that they found layoffs the most difficult issue to undertake (EPA, 1999:161).

The view of employees also endorsed the continuity of long-term employment. According to the survey by JIL (2000) noted above, nearly half of those employees in their early 30s (47.1% male and 45.5% female) expected that the rate of settlement (in one company) would remain unchanged, while 34.3% expected the rate to decline. Among the older generation (in their early 50s), 63% claimed that it would not change. Putting all these data together, the JIL study (2000:33,160) concludes that there was no immediate decline in long-term employment and that it remained the backbone of employment practice.

On the other hand, the same JIL study indicated that most companies were either implementing or expecting to implement 'a major reduction in the number of workers in head office' as part of a new personnel strategy (JIL, 2000:22). While 17.7% of respondents noted that their companies currently recruited employees on a contract basis, 50% thought that such practice would increase (*ibid.*). The survey also indicated different attitudes toward the practice of long-term employment depending on the year of company establishment. Companies established in the 1970s or later were less concerned with the maintenance of long-term employment than those companies established earlier (*ibid.*:136).

The behaviour of the younger generation also seems to suggest a trend away from long-term employment, although whether such a trend is due to a change in employers' employment strategies or individual's own will is uncertain. One study showed that job separation rates among the younger generation were rapidly increasing (JIL, 2001:3). The proportion of university graduates (male) who left a job within a year of employment increased from 8.1 % in 1992 to 12% in 1999 (13% to 17.3% for females). Among high school graduates, the rates increased from 18.9% to 22.5% for males and 19.7% to 25.6% for females in the same period. In 2000, a joint survey of the Japan Productivity Center for Socio-Economic Development and the Junior Executive Council of Japan asked over 3,000 newly employed youth⁴ about their views

⁴ The largest age brackets were 22-year-olds (37.7%), 23-year-olds (20.7%) and 18-year-olds (14.3%). Overall, 73.1% of the respondents were over 22 years of age. Respondents by sex: male (67.3%) and

toward work (SKSH and NKSK, 2000). The results indicated that the number of them who wished to work until retirement age in the current company was in decline, while the number of those who said that they would change company depending on the situation was increasing. In the survey, only 16.1% of the respondents said that they wished to stay until retirement, while 51.1% said that they would change (ibid.:4-5).

6.3.2 Impact on existing institutions (2): Further promotion of meritocracy

The increased importance placed on innovative capacity or specialised skills for reinventing competitiveness provided another rationale for modifying the reward system to better reflect individual merit and performance. Specialised professionals and most young recruits with high skills were perceived as performing better in such a merit-based system, while the traditional system with its emphasis on the length of service or seniority was seen to be no longer suitable for these types of employees (Sakamoto *et al.*, 1998). It is worthwhile noting here the different roles that the idea of 'meritocracy' played. As discussed, meritocracy was deployed as an incentive for workers to contribute more to a company's overall performance. It was assumed that that would help to maintain their jobs in difficult times. Meritocracy was, in this sense, a means of maintaining the old social convention on employment. However, the notion of meritocracy was increasingly used to support the new skills strategy, largely reflecting the changing demands of industry. Merit was also used as a means of ranking, or sometimes penalising, workers, as noted. This sometimes led to a situation in which companies enticed fierce competition among colleagues by imposing (somewhat impossible) learning targets as criteria for promotion (e.g. Tomen Corporation, in Kumazawa, 1997). When workers could not achieve the targets, they were penalised, although younger workers were better off, as this did not necessarily lead them to be sidelined as was the case for older workers (ibid.). While employers' discretion in personnel management was increasing even before the 1990s, the tendency was greatly enhanced under the severe economic climate.

female (32.4%). 65% of the respondents were university graduates, 12.3% were sub-degree post-secondary graduates and 13.3% were high school graduates.

6.3.3 Penetration of meritocracy in the workplace

A similar diversified or dual tendency also featured in the meritocratisation of the workplace. Since the war, merit and age (seniority) have both always been key aspects of determining worker status and remuneration although the relative balance of importance between these two factors has changed over time. In the recent period, it appears that meritocracy has been further promoted to cater to new talents, although a worker's long service continues to be appreciated. On the one hand, there is a considerable level of support for emphasising individual merit and performance in determining the promotion prospects or level of remuneration, as discussed. A survey of over 3,000 large companies in 2000 included a question regarding the relationship between aging and competency. The results showed that the majority of the respondents believed that the level of competency peaks around the age of 35 and declines afterwards (JIL, 2000). In other words, many of companies believed that 'seniority' or 'long-service' was not necessarily linked to a high level of competency. The survey suggested that these views would further encourage companies to modify the long-term employment system (ibid.:144). The notion of meritocracy seems also to have penetrated into the minds of workers. A survey which asked over 3,000 newly employed people⁵ about their views toward work indicated that the proportion of those who emphasised 'being skilled' as an important factor for promotion increased from 36% in 1989 to 56% in 2000, while those who emphasised 'working hard' decreased from 40% in 1988 to 22% in 2000 (SKSH and NKSK, 2000:9). On the question of an ideal pay system, the same survey showed that 62.2% preferred a 'performance/merit based system' while 13% supported a 'seniority-based system' (ibid.:7).

On the other hand, other studies have shown that although there was considerable support for performance or skills-related payment, it did not mean that seniority was completely out of the picture. In terms of 'an ideal promotions and salary increases system', the World Youth Survey in 1998 indicated that nearly half (47.5%) of Japanese respondents indicated that salary should be based "mainly on the basis of job performance, but seniority should also be taken into consideration", while only

⁵ See previous footnote for the profile of the respondents.

14.9% said that it should be based 'solely on the basis of job performance' (Management and Coordination Agency, 1999:33)⁶. According to the survey by JIL (2000), 46% of companies replied that they did not even have executives who were in their 40s, although 37% felt that they needed to rectify the situation. Similarly, 50% of companies said that line manager positions were never filled by employees straight out of the external market, although 39% felt that the practice needed substantial change (ibid.:139-140).

The difficulty of introducing the performance-based payment system was also reported, however. The results of a survey indicated the following three issues were by far the key problem areas: 1) developing clear standards for assessment; 2) adjusting assessments for those with different jobs; and 3) insufficient self-awareness and training of assessors (JIPA, 2004). While the performance-based payment system has been promoted, it has also been reported that 'the practice has been full of mistakes' (JILPT, 2005a). While the general consensus among employers is that there is no going back to the seniority-based system, an optimal formula has not been developed and a clear verdict on the new system has not yet been reached (ibid.).

6.4. Implications for the skill development system: emergence of a dual structure

The diversification, or at least the increased duality, of employment and management systems seems to be mirrored in the recent evolution of the skills development system. On the one hand, the enterprise-centred system was further enhanced by way of improving the quality and delivery of training provision by enterprises, at least until the mid-1990s. On the other hand, the importance of individuals' taking their own initiative in training was stressed and so-called 'self-study' was, or has continued to be, promoted. The former trend seems to reflect the continuous practice of long-term employment, at least for core workers, while the latter suggests that long-term

⁶ This result appears to contradict the results presented in the other survey discussed above, although it is likely that the question in the other survey presented respondents with two choices (either performance/merit or seniority), whereas this survey provided an additional choice, which took a middle way.

employment, and with it enterprise-based training opportunities, could no longer be assumed by many workers.

6.4.1 Enhancement of the enterprise-centred system

For most core workers, companies would continue to invest in training and, in turn, core workers would be expected to engage in continuous development of their skills and knowledge to improve their work performance. In this regard, there was still a trend in the 1990s to further strengthen the enterprise-centred skill development system, in particular through the enhancement of off-the-job training. Enterprises attempted to improve the quality of their existing training courses to meet skill demands, largely stemming from the rapid advance of technology. Some large companies introduced new courses in their own technical colleges which increased the theoretical component of skills development and supported a more interdisciplinary approach to training (Sakamoto *et al.*, 1998). Courses in 'mechatronics', in which engineering and electronics courses were synthesized, were an example of this trend. For instance, a major automobile manufacturer established its own technical college specifically to train 'technical-engineers', or in its term 'high-tech engineers', who could perform a high level of technical work based on strong theoretical and engineering backgrounds (*ibid.*). These workers were expected to have an overall understanding of the manufacturing process and to function as a 'bridge' between engineers and production workers, or between skilled workers and new employees.

Another large electronics company (Matsushita Denki) set up a so-called 'transforming university' in 1996 for those employees who wished to acquire specialised knowledge to move on to new job assignments (Ohara, 2001:211). The 'university' aimed to support new or priority areas of the business. Applications were invited through advertisements in the company's newsletter. The university started with five engineering departments mostly in the area of semi-conductors and high-wave circuits. It was then further expanded to 16 departments by the end of 1997, including departments of personnel management, accounting, law and intellectual property rights. More than two hundred employees enrolled in these programmes. An

'International Department' established in February 1997 provided specialised courses on China and Russia, which covered aspects such as mastering the language and learning about current affairs and society. This department was a clear indication of the company's increased business interest in those two countries (ibid.)

6.4.2 Increased training responsibility of individual workers

Employers' commitment to skill development remains unchanged, at least at the policy level (Nippon Keidanren⁷, 2005). However, while the enterprise-based system has been enhanced, the diversified employment practice has implied that the proportion of the workforce receiving such training will be reduced. The new view of Nikkeiren (1995), on the Japanese-style management system, which underlies employers' current position, recommended that, together with the introduction of the three types of employment practises, the traditional OJT-focused enterprise-centred skill development system would be maintained for core workers. Others, including highly specialised contract workers and part-time workers, would need to acquire their skills mostly through off-the-job training or self-study, outside of the enterprise (Hyodo, 1997b:510). The severe employment situation, in particular after the Asia crisis, also prompted workers to take their own initiative in training so as to be employable outside of their present company. Advocates have stressed the importance of taking a more proactive attitude toward training, relying less on the company and taking more initiative in creating one's own career. The importance of professional qualifications and the acquisition of 'portable' skills were promoted.

The differentiated approach to skill development should be viewed with caution, however. If the differentiated approach leads to skill polarisation (or inequality) among the workforce, the approach may have a detrimental effect on the existing skills contribution to enterprise competitiveness. It is highly questionable to expect that short-term workers would engage in QCs, other continuous improvement efforts or highly coordinated work practices as much as long-term core workers. This may severely challenge the competitiveness of the past. It is most likely that such skill

⁷ Nikkeiren (Japanese Federation of Employers' Associations) and Keidanren (Japan Federation of Economic Organizations) merged to form Nippon Keidanren (Japan Business Federation) in May, 2002.

polarisation negatively affects the level of workers' willingness to cooperate and learn, and their loyalty to the company (Green, 2001). Whether the industry's dual approach to skills –by promoting merit and innovative talent without undermining workers with high general and teamwork skills– will succeed in reinventing Japan's competitiveness remains to be seen. However, the cohesive work community, to which most workers had identified themselves, appears increasingly to be a thing of the past.

The increased shift of training responsibility to individual workers is also taking place among long-term core workers. As companies increasingly placed skills (or merit) at the centre of the performance appraisal and as enterprises continue to pursue higher productivity and quality with fewer skilled workers, skill credentials increasingly become a main criterion in performance appraisal. Self-study consists of training activities undertaken on individual workers' own initiatives, often at their own expense and time, by learning through, for example, correspondence courses or radio programmes. Training activities are undertaken from technical subjects to foreign languages. This means that learning activities begin to expand beyond the immediate needs of current jobs. The management rationale for promoting self-study is that individual workers now need to take their own initiative in achieving career aspirations (Sakamoto *et al.*, 1998). The promotion of self-study might have 'internalised' the notion and practice of continuous learning among workers. It was perhaps the ideal norm for the creation of 'knowledge-based companies' (Nonaka and Takeuchi, 1996) and indicated the maturity of the enterprise-centred skill development system. At the same time, however, such self-study is added 'work' to already overworked workers (Kumazawa, 1997). Since such credentials are also used as a main criterion for appraisal, which could rank or even penalise workers, many workers do not have a choice but to respond to such demands. Another critic highlights that 'the problem is that skill development necessary for undertaking work is left to individuals' initiatives, and the outcome of such initiatives are directly linked to their career prospects' (Hiranuma, 1998).

6.4.3 Increased role of the government in skill development

While the old social agreement on employment has been modified considerably, the role of the government in shaping the skill development system seems to be increasing (MHLW, 2005a). Rising unemployment and the shrinking proportion of workers with long-term employment prospects means that the government needs to act for the skill development of those who are outside of the enterprise-centred skill development system. The enactment of the Life-time Education Promotion Law (1990) and the streamlining of the Human Resource Development Promotion Law⁸ led to a sharp increase in related budget allocations (Chalmers, 1994:3). The eligibility of enterprises applying for the government's employment adjustment subsidies (including retraining subsidies) was eased during the recession in 1992 (ibid.). Other main measures introduced by the government also include: subsidies for education and training courses for individuals (since 1998); and the development of a framework for career development for white-collar workers. The extent of the government's role remains to be seen, however. Some argue that the government's intention has been limited to meeting the current demands of those who are outside of the enterprise skill system, in particular in dealing with young people who are unemployed or not in regular full-time employment (Inui, forthcoming).

6.4.4 Response of labour unions in the midst of self-renewal

It is worth considering the response of unions to these largely employer-led reforms in personnel and skill management. On one hand, labour unions have continued to influence issues related to employment. A study provides the example of the textile industry where there were very few industrial disputes, despite the closure of a number of companies in the industry in the 1990s, as many employers made efforts to secure new jobs for employees (Hisamoto, 1998). On the other hand, the influence of unions has further weakened in other aspects. Labour unions were seen as particularly ineffective in blocking or curtailing greater management discretion in tight personal

⁸ The law was originally enacted in 1969 and subsequently amended on several occasions thereafter, notably in the 1990s.

management (Hiranuma, 1998). In terms of skill development, companies had almost complete discretion in determining skill competencies required for a particular job or a particular worker. As there was no national standard, or any kind of cross-company standards, which are agreed and accepted across enterprises in the same industrial sector, the types and levels of skills which enterprises demand from workers cannot be regulated (Kumazawa, 1997). There is very limited transparency in the system. One study suggests that this is the area where most complaints are concentrated (Hyodo, 1997b:529-530). There were some attempts by individual unions (e.g. in electronics) to intervene (ibid.: 532-536). However, it was generally seen that the unions' intervention was limited in developing intra-industry standards or some other ways to regulate the setting of competency targets, even though a more profound involvement was vital for protecting workers from the potential misuse of the company-managed appraisal system (Kumazawa, 1997:196-200).

The limited intervention by unions was closely related to the unions' own attempt to reinvent themselves to be more relevant in meeting the current demands of workers. The movement was already in the making in the 1980s. The reformist faction of the unions stressed the need to address issues beyond employment by seeking more active involvement in policy making (Hyodo, 1997b: ch.7). The strategy they took was to take a more collaborative stance, rather than a confrontational one, regarding employers' and/or the government's strategies. Such a stance was influenced by the success of overcoming the economic shortfall caused by the oil crisis in the 1970s, in which unions decided to put the life of the company before their own demands so as not to be destroyed altogether (ibid.:517). When the reformist faction of the unions began to advocate for taking a collaborative stance in the 1980s, many workers within the public sector's Sohyo union were afraid that this would result in a collaborative sell-out to government and big business (ibid.: ch.7; Aspinall, 2001:154). As a result, the unions were split by this factionalism. However, by the end of the 1980s the reformist wing of the unions became dominant and this led to the formation of the largest union confederation (*Rengo*) through the amalgamation of the moderate wings of both public and private unions in 1989. However, as enterprises struggled to survive under the prolonged recession, the labour union's repositioning to a more

collaborative stance seems to have allowed –albeit unintentionally– for the greater influence of employers’ interests in matters related to employment. Falling union density also weakened the power of unions in influencing the policy-making process. As revealed in Table. 6.2, union density continued its gradual decline since 1950 with the proportion of unionised workers decreasing from 25.2% in 1990 to 19.2% in 2004.

Table 6.2: Trends in number of labour unions and membership, Japan, 1950-2004

	Members (thousands)	Estimated unionization rate (%)
1950	5,774	46.2
1960	7,662	32.2
1970	11,605	35.4
1980	12,369	30.8
1990	12,265	25.2
2000	11,539	21.5
2001	11,212	20.7
2002	10,801	20.2
2003	10,531	19.6
2004	10,309	19.2

Source: JILPT (2005b)

A judgement on whether the union’s repositioning was the right move or not is the subject of an on-going debate. However, it seems generally accepted by now that the unions’ influence in regulating employers’ actions has been limited. Hyodo (1997b:516) states that if they were to maintain the stance that ‘both an employer and employees were workers of the (same) corporation’, the unions’ influence to eliminate the malaise of capitalism would inevitably be weakened. It has been reported also that former leading figures in the unions also admitted that there might have been a misjudgement on the part of the unions (*ibid.*). The difficulty in achieving the union’s demands in the challenging economic climate was also acknowledged in a position paper by the president of Rengo (Mr. Sasamori) in 2000. He also stressed the importance of breaking the prevailing public perception that unions are conservative and their demands are narrowly focused (Rengo, 2000:2).

6.4.5 Response of the government

The increased concern with long working hours indeed prompted the government to pass a law to regulate and reduce working hours to around 1,800 hours in 1992 (JIL, 1996). Although it is beyond the scope of this chapter to document the impact of the law, it is widely understood that it was largely ineffective. While the number of working hours was reduced statistically (from around 2,100 hours in the late 1980s to 1,909 hours in 1994), in many cases the law led workers not to report their overtime (so-called 'service overtime') (ibid.). This made the matter worse: workers were not paid for overtime work because they did not officially report it (this is dubbed '*service over-time work*').

It should be noted, however, that the government, employers and workers have attempted to maintain their collaboration on employment security. In December 2002, the tripartite actors in fact signed an agreement pledging their continued cooperation on the issue (Nippon Keidanren, 2002). Employers reaffirmed their social responsibility to do their best on employment security. In reality, however, without substantial and effective intervention by the other parties (the unions in particular) personnel management and skill development systems have been shaped increasingly by employers and the pressures of the market.

6.5. Reform of the education system and its implication

While business struggled to find solutions for slow growth, the education system was also under scrutiny in its own right. Besides the new skills requirements discussed above, there were growing social problems at Japanese schools, notably the increased delinquency in the classroom, absenteeism, school violence, bullying and, in the worst cases, suicides.

The strength of the Japanese system was attributed, to a large extent, to its egalitarian principle in education and its standardized and unified approach to school education. On the basis of this system, students were encouraged to work hard to climb the educational ladder as high as possible. As a result, the majority of the workforce

was equipped with a high standard of general skills, which was admired by countries suffering from inequality in student achievement even in basic skills and a substantial number of under-achievers (Sakamoto *et al.*, 1998). Ironically, however, it was this unified and highly competitive system that was largely blamed as the cause of growing social problems. It was argued that the uniform system, which taught all children with a unified teaching approach and materials, did not take sufficient account of individual differences among children (Green *et al.*, 1998). The highly competitive, exam-centred education system was also criticised for 'cramming students with knowledge', which stifled their creativity and autonomy and promoted passive attitudes toward learning. The growing social problems at schools were regarded as stemming from students' mounting frustration with the existing system. In this light, the education system was also seen as having reached its limit, similarly to the employment system.

Although it was largely responding to a different problem, the policy discourse of the education reform was broadly in line with the new skills needs of industry. The recommendations of the Central Committee of Education (CCE), an advisory body to the Monbusho and the main actor in the reform, emphasised the importance of granting respect for 'individuality' and the importance of cultivating 'creativity' (CCE, 1996, 1997). The Committee also emphasised the need for loosening up the system so as to give students more 'room to grow' (*yutori*) to nurture their autonomy and their ability to think (*ibid.*; Green *et al.*, 1998). In practice, this led to a reduction in school days and curriculum content so as to focus on 'essential elements' (*ibid.*). The emphasis on individuality was also reflected in the course of the education reform. Curriculum reform also placed importance on making the system more responsive to individual needs by promoting the autonomy of individual schools and teachers in curriculum development and classroom pedagogy (Sakamoto *et al.*, 1998:30). At the classroom level, a style of teaching which respects individual differences and facilitates an ability to think and act autonomously was explored, although many teachers found it difficult to put these ideas into practice (*ibid.*). A major reform was also initiated at the higher education level to rectify its generalist inclination and to promote more specialisation (MOESSC, 1998 and 1999).

6.5.1 Teachers' union's view

The final report of the 21st Century Vision Committee of Nikkyoso (Japan Teachers' Union) published in 1995 was very much in tune with the view of the Monbusho, expressed through the CCE. Nikkyoso's converging view was observed in particular in terms of its emphasis on individuality. The report expressed the view that, in light of the economic, social and political changes of the 1990s, 'the conventional (so-called vertical) system which involves excessive dependence on companies and families for the education of children and for care of the aged should be replaced by a horizontal social system in which citizens support each other, fulfil social responsibilities and coexist *on the principle of respect for individuals*' (Nikkyoso, 1995:2, emphasis added). Throughout the report, Nikkyoso criticised, as it traditionally had done, the existing situation of the education system primarily serving the skill needs of industry. At the same time, however, it expressed its vision of 21st century Japan as a society with greater respect for individuality and stressed the importance of seeing children as individuals not as a monolithic entity. The position marked a clear departure from its being the guardian of the egalitarian system in the past, rigidly defending the standardised and uniformed approach to education for all.

6.5.2 Repositioning of Nikkyoso

Behind this repositioning of Nikkyoso was an attempt by the union to reinvent itself, similar to the move made by the enterprise unions. Nikkyoso also experienced a similar fate as the enterprise unions. It was split between those who wanted to build trust between the union and Monbusho and those who wanted to continue with a confrontational approach (Aspinall, 2001:148). There was growth in the moderate wing within Nikkyoso since the mid-1980s, while the traditional wing, which was committed to remaining as the guardian of the egalitarian system and of the autonomy of the education system from the government's control, broke away to form another teacher union (*Zenkyo*). It was a strategic move by Nikkyoso to counter falling

membership and to gain access to policymaking.⁹ In fact, taking a more collaborative stance was regarded as the only choice for it to be an effective national teachers' union (ibid.). It was in this light that Nikkyoso published the final report of the 21st Century Vision Committee, discussed above, and officially repositioned itself to 'reconcile' its view with the Monbusho¹⁰ in 1995 (Kariya, 1995:219). It was the end of an era, ending the decades of hostile, conflicting relations between the largest teachers' union and the Monbusho.

The full outcome of Nikkyoso's repositioning and the reconciliation with the Monbusho remains to be seen. However, Nikkyoso's efforts in gaining access to policymaking channels were seen to have achieved minimal success so far (Aspinall, 2001:187.) However, the Monbusho has not taken the opportunity of Nikkyoso's repositioning to impose a right-wing set of reforms on the education system either (ibid.). Instead, the Monbusho has been challenged by the reform proposals such as the increased flexibilization and decentralisation of the education system (supported by the *Keidannen*), which were regarded as threats to the Monbusho's centralised control of education (ibid.). In this regard, despite the demise of the conflictual relationship, there has not been a radical change in the education system. The education debate continues to explore familiar issues such as 'what is good and bad education', but a clear future direction has yet to emerge (Kariya, 1995:219).

6.5.3 Education and work: emergence of a polarised structure

The education system and the pattern of school-to-work transition has been increasingly characterised by duality similar to that observed in the employment and management system. At one level, the old structure, in which graduates from highly ranked universities have the best prospects for employment in prestigious companies, largely remains. Competition to enter prestigious universities is as fierce as before, although the size of the age cohort has been shrinking in Japan, which should, statistically, make entry into higher education easier overall. On the other hand, the

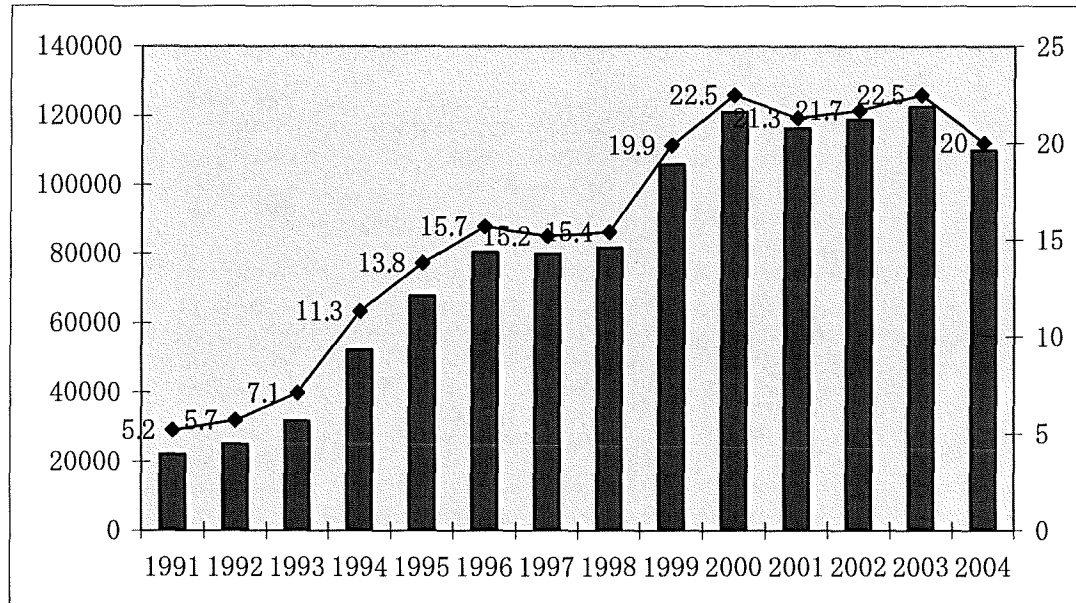
⁹ Nikkyoso only had legal status at the prefecture level and not as a national body. This effectively excluded it from policymaking processes at the national level.

¹⁰ Ministry of Education, Science, Sports and Culture.

general pattern of the school-to-work transition, in which the majority of graduates gain regular full-time employment immediately after graduation and are trained specifically on-the-job predominately in a company, is changing rapidly. Between the employment, management and education systems, the change in the pattern of the school-to-work transition appears to be the most profound. While the traditional education and transition pattern has remained unchanged as a career route for regular full-time (or core) workers, the diversification of employment practice, together with education reform is prompting a considerable proportion of the youth to follow an alternative transition pattern. There is also a general change in the behaviour and attitudes towards work among the young generation.

According to the population census, in 1975 41% of those aged 18-19 were in employment, of which 84.3% were regular full-time employees. In the same year, 58.8% of those aged 20-24 were in employment, of which 85.3% were regular full-time workers (Inui, forthcoming). By contrast, in 2000, while 34.3% of those aged 18-19 were in employment, only 48.5% of them were regular employees. The proportion of those aged 20-24 in regular employment declined to 70.1% in 2000 (*ibid.*). While the general unemployment rate finally began to improve in 2002, the rate for the younger cohort has worsened. The general rate was 5.3% in 2003, whereas the rates for those aged 15-19, 20-24 and 25-29 were 11.9%, 9.8% and 7.0%, respectively (MIC, 2004). The proportion of graduates, both high school and university, that is neither at work nor in other education and training programmes, has been increasing. For example, the proportion of university graduates in neither employment, education or training rose from 5.2% in 1991 to 20% in 2004 (Figure. 6.1). The rate for male high school graduates increased from 5.2% to 9.2%, while that for female graduates increased from 4.2% to 10.7% in the same period (JIL, 2001:3). A study on 'Young people's job search activities and views in large cities' (JIL, 2000) shows that the proportion of those aged 15-24 who could find only part-time or temporary employment is the highest in large cities, reaching up to 30%. They work largely in the service sector.

Figure 6.1: Trends in university graduates not in employment, education or training, 1991-2004, Japan



Source: MHLW (2005b:298)

While a considerable proportion of them found regular full-time employment by their late 20s (75% of male, 47% of female workers), such prospects for long-term part-timers (more than two years), was grim –only 23% found it (ibid.:20). Although these changes are not totally altering the traditional picture of the school-to-work transition, the changes are rapid and youth unemployment has become a serious issue.

Increased youth unemployment is partly to do with changing recruitment practices, as companies employ more part-time and contract workers. In order to avoid laying-off existing employees, many companies opt for hiring freezes, which reduces the overall number of job vacancies for new graduates. However, it also involves changing attitudes among young people towards work. The above study by JIL (2000) stated that the survey of young short-term workers revealed that many of them opted for a part-time job as their own choice. They chose to take such an option while looking for a suitable job or they preferred a freer work style (Kosugi, 2003). Some respondents also mentioned that they wanted to get various ‘experiences’ before they settled into a regular full-time job (JIL, 2001:19). It is interesting to note that the survey found that those male workers who returned to a full-time job tended to express a strong desire to start their own businesses in the future, which was previously

uncharacteristic of young people (ibid.:20). Although the current difficult employment situation might have facilitated it, these part-time workers' views seem to suggest that young people are developing new attitudes towards work and lifestyle, which are quite different from those of their predecessors.

The downside of the increased number of young people in part-time employment is that they do not get access to training opportunities, which regular workers receive. For those who were in part-time employment for a long period, this is a major bottleneck in gaining full-time work (ibid:27; Inui, forthcoming). While a considerable majority of youth still pursue rigorous academic training and then, for full-time regular workers, enterprise training afterwards, the skills gap between the two groups of youth is likely to widen. While the education reform intends to maintain the standard of teaching 'essentials', there is a growing concern that the reduction of school days and the content of the curriculum will lead to a decline of general skills and knowledge. The widening inequality of student attainment and the declining general standard of public education is a serious threat to the enterprise-centred skill development system (Green, 2001). The policy discourse in the education sector appears to be in line with the new skill requirements in industry (e.g. creativity, ability to think, taking risks). However, there is no evidence yet to suggest that the reform in the education system is working to meet such new skill demands.

Conclusion

The key institutions of the skill development system (e.g. employment, management and education practices) continued to be shaped by the interests of the stakeholders in the 1990s. However, it was not an outcome of the *negotiations* between stakeholders with different interests as before (on issues such as employment and work practices). Rather it was the unintended coincidence of different stakeholders pursuing their own interests as they responded to their own separate challenges that resulted in the remoulding of the system.

The 1990s began with a society-wide reflection (including employers, workers and the government) on the way people lived, worked and were educated and which

was referred to in the chapter as the malaise of industrial society. Individual workers began to seek a better quality of life and greater diversity and individuality rather than material wealth. This reflection led to a shift away from a stubborn adherence to the existing systems. For employers, when the economic situation worsened by the mid-1990s they were confronted with the need to further reduce personnel costs by employing few (but highly skilled) workers. The direction of the reform, led by employers, was to diversify employment practices by the type of employment contract and to reinforce meritocracy in the workplace. For their part, unions, which had struggled since the 1980s to halt their declining membership, reinvented themselves to meet the needs of their members. For this, the unions went through major schisms and by the beginning of the 1990s (and by the mid-1990s for the teachers' union) the unions' opted for a less confrontational and more collaborative stance.

Attempts by various stakeholders to address the new challenges produced an unintended outcome. Individuals' desire to pursue individuality and thus diversity in their lives provided a rationale for employers' reforms in employment and management systems. However, while the new employment practices might have increased 'diversity' in workers' careers, in the face of economic difficulty there was no sign of a better balance between work and private life. In reality, employment became less secure for many workers. At the same time, the unions' effort to reinvent themselves by taking a collaborative stance severely limited their capacity to regulate the negative side of a more competitive capitalism (Kumazawa, 1997; Hyodo, 1997b; Makino, 1998).

The evolution of the skill development system reflected these dynamics. Diversified employment practices created different skill development paths for workers depending on the type of contract. While the enterprise-centred skill development continues to operate and has strengthened, it is increasingly provided for fewer workers with long-term employment prospects. For the rest, skill development outside of enterprises is increasingly becoming important and skill development is increasingly becoming an individual's own responsibility. Even long-term employees are under pressure to take their own initiative in skill development, including seeking training outside the enterprise, since such effort is linked to their performance appraisal. The

rising number of unemployed people and of people with unstable employment means that the number of those who are outside of the traditional skill development system is increasing.

What is also emerging is a polarisation among young people in terms of the school-to-work transition. Young people are increasingly divided into two groups: those who pursue the traditional pattern of academically rigorous training followed by enterprise training and those who do not pursue this path. The changing attitudes among young people reflect many factors. The chapter discussed how it can partly be a reaction to the limitations of the existing rigid and highly competitive education system; and partly the reduced employment opportunities for new graduates. The current discourse of education reform also seems to be contributing to the polarisation of youth. Although the possible reasons are many, there is a coincidence with the emerging dual pattern in the education system corresponding somewhat to the new diversified employment practices. While the enterprise-centred system remains the backbone of the Japanese skill development system, the system is becoming less monolithic than it used to be.

Chapter 7 Formation of state-led tripartism in the new republic (1965 – mid-1980s)

While both Japan and Singapore aimed to achieve rapid economic growth, their distinctive political and economic situations conditioned power relations among the government, employers and workers. On the one hand, Japan's defeat in the war allowed for a relative balance of power among these stakeholders and for the increased influence of non-state forces in shaping institutions and the skill development system. On the other hand, in Singapore, the unexpected separation from the Federation of Malaysia in 1965 created a situation in which the government rose to take a leadership role in the social and economic transformation deemed necessary to survive. There were initially serious doubts about the political and economic survival of Singapore. The sudden expulsion from the Federation left the small island cut off from resources and surrounded by hostility. The hostility of Indonesia to Malaya between 1963 and 1966 interrupted trade with Singapore and ruined much of its entrepot economy (Castells, 1988). Racial and labour unrest was rampant and unemployment was high; Singapore's largely entrepot economy provided limited prospects for economic growth. The task of overcoming these crises provided the basis for the government to urge the population to mobilise for broader national goals by putting other immediate concerns aside.¹ The government, led by the charismatic Lee Kuan Yew, rose to the challenge.

Measures designed to achieve rapid employment generation, growth of the economy and competitiveness took primacy as a result. In this context, the government called for social discipline by workers in return for jobs, good schooling and subsidised housing; it was an implicit social contract (Gopinathan, 1997:49). Under the state of emergency-like situation, the government could not allow racial and labour movements

¹ After 1965, the PAP rallied national support for a survival strategy emphasising sacrifices by the electorate (Pang and Tan, 1983:238).

to get out of control and bring down the fragile state. The state therefore used its power to condition and control labour. This was carried out by Lee Kuan Yew's People's Action Party (PAP) and its control of government from the time of the new Singaporean government of 1959 to the first post-independence government of 1965 and subsequently thereafter. As is demonstrated in this chapter, PAP governments used a variety of means, often coercive, to condition labour, including powerful legislation backed by the state's security apparatus, political persuasion and, significantly, the promotion and control that it exercised over the dominant labour organisation, the National Trades Union Congress (NTUC). Indeed, by the time of independence in 1965, the PAP had effectively eliminated or undermined most effective opposition to its rule by communists, militant trade unionists or other social factions. This allowed the government to exercise a powerful role in setting the agenda and conditioning subsequent social dialogue.

Power relations between the government and labour, conditioned by the above situation, set the basic context for the development of institutions which constituted the skills system. These institutions included employment practices, the wage structure and the link between education and the labour market, which together contributed to the development of the state-led skill system in Singapore. The chapter argues that, as in the case of post-war Japan, these institutions evolved as the result of the contestation of stakeholder interests and reflected the conflicts and power relations among them. As a result, the skill development system in Singapore has come to be state-led, centring on pre-employment (formal) education and training institutes, which are closely linked to the nation's political and economic needs, albeit within the context of a flexible external labour market.

This chapter pursues the argument by analysing the various interests and the outcomes of the contestation between them. A major difference between Singapore and Japan is the way in which interests were contested. In Japan, contestation took place largely over the introduction of specific policies or laws. In Singapore, contestation took place before the introduction of bills or new policies. Over the long term, the government gained legitimacy and the general support of labour while encouraging it to take a collaborative stance. In this respect, the chapter examines the

process by which the re-orientation of labour led to the particular characteristics of the labour market and of employment practices, rather than focusing on a few specific policies. The influence and interactions of tripartite actors is also examined through an analysis of the National Wage Council. The analysis of the education and training system demonstrates the contestation of interests both prior to and after the introduction of new policies.

7.1 Shaping of employment practice and the labour market: the reorientation of labour

As examined in the chapter on Japan, employment practices and the characteristics of the labour market are the main institutions which provide a broad incentive mechanism for individuals and firms to train. Unlike Japan where the internal labour market facilitated long-term skill development within companies, Singapore took a different route, developing a largely external labour market with relatively high labour mobility. These characteristics have provided the conditions by which the task of skill development could not be left to companies, and thus it encouraged the government to seek other routes for skill development. The government was pro-business and pro-market; however it tactfully managed such market forces to meet the goals of national development. In relation to labour, the government not only managed to reorient unions to support national goals, but also, by doing so, increased its control over matters relating to work (i.e. employment practices, industrial relations and wage structures). In this manner, the government played a central and instrumental role in orienting employment practices including wage determination. While labour unions in post-war Japan were a major force of opposition to the government's efforts to link formal education to the needs of economy, in Singapore, the central role for the state made the close link between formal education and the economy unquestionable.

The construction of a fluid yet nationally cohesive labour market was largely pursued by the reorientation of labour. However, to do so was one of the biggest challenges of the newly independent Singapore. The issue of labour unrest was an on-going problem since the colonial period. Differences in ideologies and interests, which

provided the basis for the labour movement, were wide and deep (Lee, 1998). They were partly related to the frustration of the Chinese-educated community against the social inequality which existed between it and the English-educated community (which includes Chinese and other races). As noted by Gopinathan (1996:3), the “civil service and the large agency houses that controlled the economy were dominated by the English-educated, while Chinese-educated graduates in the years prior to and soon after the war had little vocational opportunities”. Differences also related to the infiltration of the Malayan Communist Party which used labour unions as one of the organisational bases for opposition to the colonial government and later to the rule of the People’s Action Party (PAP) (Deyo, 1981:39). Strikes and social unrest spread from the mid-1940s to the late 1950s and the loss of manpower due to strike action in 1955 alone amounted to nearly one million man-days of work (ibid.:43). On the other hand, the new government embarked on a strategy of rapid industrialisation, where peaceful industrial relations were vital for success. Thus, achieving the reorientation of labour to take a collaborative stance required a political settlement for these contested interests.

The process of reorienting labour in Singapore was, in itself, the process of unifying different interests into a single pro-Singaporean interest, or at least of agreeing to the supremacy of the pro-Singaporean interest. In practice, the contestation and negotiation of different interests took place and were settled during the reform of existing labour organisations centring on the National Trade Union Congress (NTUC). The new structure put in place a system in which the concerns of workers were expressed through representation in the NTUC. The key positions in the NTUC were, however, held by pro-government members. The section below investigates the contestation of interests and the subsequent shaping the institutions that comprised the skill development system.

7.1.1 Organisation of labour prior to industrialization

Prior to industrialisation, workers in Singapore were largely organised along ethnic lines and further in terms of dialect. As an entrepot economy largely consisting of

immigrant workers, recruitment was initially confined to “narrow groups of shared kinship or place of origin” (Deyo, 1981:29). As a result, there was a tendency towards occupational specialisation along ethnic and dialect lines. Among the Chinese in particular, most trades were tightly organised through dialect-specific guilds and trade associations whose main role was to reduce competition or maintain group monopolization of given trades (Sumiya, 1962 in Deyo, 1981).² This meant that labour mobility was largely confined within ethnic/dialect groups and the same occupations. An emphasis on occupational guilds, labour subcontracting systems and personal recommendation systems were the main characteristics of the employment system (ibid.:31). The importance of occupational guilds and personal recommendations also meant that labour mobility was constrained by individuals’ own ethnic/dialect community. Workers tended to live close to their work, thus creating ethnic- and dialect-based districts that further structured of the labour market.

In addition, ethnic- and dialect-based social associations played a substantial role in the lives of workers. The main role of these social associations was to provide services which the colonial government failed to provide (Gopinathan, 1974; Deyo, 1981). Guilds, trade associations and other social associations were financed and managed by local businessmen. Schooling for the Chinese community was particularly financed in this way. As the colonial government did not provide any support to Chinese education, the Chinese community was left very much to itself (Wong, 1988:4; Gopinathan, 1974). It did, however, form a broader ethnic-based business association, the Singapore Chinese Chamber of Commerce in 1906 by recruiting members from various dialect groups (Deyo, 1981:33). Social and labour disputes in the community were referred to and handled by this organisation and it represented the Chinese community’s interests in relations with the colonial government (ibid.). Trade unions in Singapore emerged from such ethnic/dialect-based social associations and such unions first appeared among Chinese skilled mechanics and clerical workers (ibid.:36).

² The establishment of guilds can be traced back as early as the mid-1800s (ibid.).

The expansion of communism and militant labour movements

From the early 1920s, the labour movement in Singapore gained momentum from the spread of communism. The first trade unions were formed when the Chinese community responded sympathetically to the growing labour movement on mainland China (Deyo, 1981:31). This national sentiment and the bleak prospects for Chinese youth in terms of employment opportunities under English rule encouraged the infiltration of communist influence (e.g. Lee, 1998; Gopinathan, 1974). Supported by ethnic sentiment and communist ideology, the Malayan Communist Party (MCP) attempted to overthrow the colonial government and many labour organisations became front organisations for the MCP (Lee, 1976). The Chinese social associations, in particular its schools and other education institutes, were also vulnerable to MCP's infiltration and they became highly politicised and provided support to labour strikes (e.g. Gopinathan, 1974).

What followed was a feverish unionism involving militant labour strikes throughout the 1940s and 1950s and a 'tit-for-tat' with the government in which the latter attempted to suppress this political form of unionism but the unions continuously fought back. The intensified labour strikes of the mid-1940s led the colonial government to declare a state of emergency in 1948, which to some extent curtailed the capacity of unions to disrupt industrial peace. By the mid-1950s, however, militant (political) unionism was back, despite the colonial government's early moves to support self-governance in 1955. The most influential militant union was the Singapore Factory and Shop Workers' Union (SFSWU) which was established in April 1954 and rapidly increased its membership from a mere 200 to 30,000 within ten months (Pang and Tan, 1983:229). In 1955 alone, 275 strikes were called, compared with only 8 in 1954. Widespread strikes and riots crippled the economy. The events were followed by another government attempt to suppress militant unionism by detaining its leaders and deregistering the SFSWU (ibid.). After gaining self-government in 1959, the ruling PAP enacted the Industrial Relations Ordinance in 1960 to give the state an active role in regulating industrial relations. The Ordinance included the establishment of the Industrial Arbitration Court (IAC). Either management or a union could refer a dispute to the IAC but once a dispute was referred

strike action became illegal (Chew, 1991:62). While these government measures were gradually curbing unionism, their effectiveness was only partial. This was largely due to an internal division within the PAP between Chinese-educated leftist socialists, such as Lim Chin Siong and Fong Swee Suan, and English-educated moderates, such as Lee Kuan Yew and Toh Chin Chye (Chew, 1991:32; Pang and Seow, 1983:229).³

Schism within the PAP

The turning point regarding labour unrest came in 1961 with a schism within the PAP. The communist-influenced leftist segment of the PAP broke away and formed a new party, Barisan Socialis, over disagreement on whether Singapore should join Malaya. With this schism, the labour unions were also divided into two umbrella organisations: one was the pro-PAP National Trades Union Congress (NTUC) supported mainly by the English-speaking white-collar unions and the other was the Singapore Association of Trade Union (SATU) mainly supported by the Chinese-speaking blue-collar unions (Pang and Seow, 1983:230). The ruling PAP campaigned to join the Federation of Malaya, while the Barisan was opposed. In the end, the PAP held a referendum and won by a tight margin, and Singapore merged with the rest of the Federation of Malaya in 1963 (to form the Federation of Malaysia). As the Barisan opposed the merger, its defeat in the referendum and the subsequent merger of Singapore with the Federation led to the arrests of many of its leaders. The loss of leaders and the subsequent internal disagreements within the Barisan weakened the party. The schism and the triumph in the referendum made clear the PAP's position towards political unionism. PAP then began a systematic de-politicisation of labour:

The PAP government had used political instruments to wipe out political strikes. For example, under the Internal Security Council which allows the government to detain people without trial, the PAP government arrested many left-wing activists. Many left-wing unions were de-registered (Chew, 1991:62).

³ The PAP, at least, in its origins, was clearly a left-wing party of self-declared socialist that lead a national movement. For many years, it had a *de facto* alliance with the communists outside of the party and with left-wing militants within the PAP itself (Castells, 1988:40-43). Lee Kuan Yew made his reputation as a lawyer defending labour unions in their collective bargaining and defending student activists repressed by the colonial government (*ibid.*). However he later came to regard the communists as a destructive force that would undermine Singapore's survival.

By the time Singapore separated from the Federation in 1965, the Barisan was no longer a threat to the PAP (Pang and Seow, 1983:230-231). By then, the labour movement had been substantially curtailed by the PAP government's strict control over opposition unions. The number of industrial work stoppages was reduced by 90% compared to 1955 (Deyo, 1981:42-43). As shown in Table 7.1, days lost to strikes and lockouts declined considerably from 1965 onwards. Furthermore, between 1978 and 1996, only one strike occurred (in 1986).

7.1.2 Rapid industrialisation and the changing nature of unionism: the establishment of a new tripartism

The re-orientation of labour was further fuelled by Singapore's need for rapid industrialisation upon separation from the Federation of Malaysia in 1965. Not only worker discipline but also their active support and collaboration became essential for the government's strategy of achieving rapid industrialisation (e.g. Rodan, 1989). Such industrialisation was considered necessary for the political and economic survival of the newly independent nation amidst fragile external relations. However, it was also necessary to prevent the nation from collapsing due to internal conflict and social unrest. High rates of unemployment and poverty were a source of grievance and social unrest, despite the best efforts of the PAP government to control and restore public order (Lee, 1998). Rapid industrialisation, with the aim of reducing unemployment, was thus designed to prevent the formation of social groups that might challenge the existing social order and PAP rule (Heyzer, 1983). After 1965, the government shifted its economic strategy from import-substitution to export-oriented, labour-intensive industrialisation. The government promoted inward foreign investment, in particular, of labour-absorbing industry. For the creation of a favourable investment climate, industrial peace was one of the most important conditions that the newly independent nation could provide.

The shift in economic strategy thus intensified the government's efforts to gain the support of labour. The PAP government rallied national support for a survival

Table 7.1: Stoppages (strikes and lockouts), workers involved, days lost, average length, Singapore, 1946-1996

Year	No. of stoppages	Workers involved	Person-days lost	Average length of stoppage (work days)
1946	47	50,325	845,637	16.8
1947	45	24,561	492,708	20.1
1948	20	20,586	128,657	6.2
1949	3	935	6,618	7.1
1950	1	87	4,692	53.9
1951	4	1,185	20,640	17.4
1952	5	10,067	40,105	4.0
1953	4	8,870	47,361	5.3
1954	8	11,191	135,206	12.1
1955	275	57,433	946,354	16.5
1956	29	12,373	454,455	36.7
1957	27	8,233	109,349	13.3
1958	22	2,679	78,166	29.2
1959	40	1,939	26,587	13.7
1960	45	5,939	152,005	25.6
1961	116	43,584	410,889	9.4
1962	88	6,647	165,124	24.8
1963	47	33,004	388,219	11.8
1964	39	2,535	35,908	14.2
1965	30	3,374	45,800	13.6
1966	14	1,288	44,762	34.8
1967	10	4,491	41,322	9.2
1968	4	172	11,447	66.6
1969	--	--	8,512	--
1970	5	1,749	2,514	1.4
1971	2	1,380	5,449	3.9
1972	10	3,168	18,233	5.8
1973	5	1,312	2,295	1.8
1974	10	1,901	5,380	2.8
1975	7	1,865	4,853	2.6
1976	4	1,576	3,193	2.0
1977	1	406	1,011	2.5
1978	0	0	0	0
1986*	1	61	122	2.0
1996	0	0	0	0

Source: Lim (1998b), p. 29, except final column which was calculated by the author from two previous columns, i.e. Person-days lost/Workers involved. Note: Between 1978 and 1996 only one stoppage occurred (1986).

strategy emphasising sacrifices by the electorate (Pang and Tan, 1983:230). To achieve rapid industrialisation, “unions had to give up their narrow membership-welfare orientation and look to their broader responsibilities to the nation: responsibilities which included wage restraint, increased productivity, and industrial discipline” (Deyo 1981:42). For unions “to continue in their traditional role...came to be viewed as fundamentally anti-social” (ibid.). The PAP’s tactics to depoliticise labour and create cooperative unions were systematic. These included: i) deregistration of anti-government unions; ii) detention of left-wing leaders; iii) implementation of tough labour laws; iv) nurturing and sponsorship of pro-government unions; and, 5) establishment of the National Wages Council in 1972 to ensure orderly wage increases (Tan, 1993: 397). Various mechanisms of social control were established to contain the emergence of anti-government activists and bodies, including the low-cost housing programme which satisfied election promises effectively and rapidly (Heyzer, 1983:376).

Government policy also led to a high level of job creation. The level of foreign investment increased rapidly. In 1968-69, foreign manufacturing investment rose from US\$184 million to \$515 million (Buchanam, 1969 in Deyo, 1981:60). The period 1960-1972 witnessed the creation of over 250,000 new jobs (Heyzer, 1983:376). The rapid increase of labour-absorbing manufacturing contributed much to employment generation. During the 1960s, the proportion of employment in manufacturing (such as textiles, clothing, electronic goods, transport equipment and fabricated materials) increased from one-fifth to one-third of the labour force (Pang and Seow, 1983:105). The level of unemployment was reduced from more than 10% in the first half of the 1960s, to 6% in 1970 and 3.9% in 1974 (ibid.:160). Despite the excess labour supply, the policy of wage restraint and the large inflow of low-wage female workers, average nominal weekly earnings for blue-collar workers rose by 2% a year in the 1960s (ibid.:105). Due to the strict control of labour, the number of strikes was reduced from 30 in 1965 to just four in 1968 (Pang and Tan, 1983:230).

The government’s effort to cement industrial peace and to attract further investment was enhanced by its tightening of the legal framework regulating industrial relations and employment practices. The Employment Act and the Amendment to the

Industrial Relations Act were enacted in 1968 (Pang and Kay, 1974). The latter gave greater discretion to employers in industrial relations and allowed them complete discretion over matters such as promotion, internal transfers of employees, hirings and dismissals (Chew and Chew, 1998). The issue of retrenchment became no longer an item for negotiation between employers and unions and thus strikes against retrenchment became illegal. The Employment Act allowed employers to reduce labour costs by cutting down on bonuses, annual leave, retrenchment benefits, retirement benefits and overtime (ibid). This legislation increased the government's dominance over industrial relations as it modified the rules of interaction between employers and unions and limited the form and power of labour organisations (Pang and Kay, 1974:9). The event contrasts greatly with the power of the unions in the early decades of post-war Japan when they demanded long-term employment practices, a seniority-wage structure and even co-management. The reorientation of labour was achieved to such an extent that there was an "absence of a single negative vote, even on the part of labour MPs" when the Employment Act was passed in parliament (Chan, 1976 in Deyo, 1981:77). The dominance of a single political party, PAP, had prevailed.⁴

Owing largely to their close association with the PAP leadership, the NTUC leaders accepted the new legislation (Pang and Tan, 1983:230). An NTUC seminar, titled "Modernising Labour", held in the following year (1969) was indicative of labour's acceptance of their new role in contributing to the broader collective interests of the country (ibid; Pang and Seow, 1983). This seminar, which was attended by all the key players in the economic and political arena, made union leaders realise that "workers have many other social roles and were, in effect, co-owners in society" (Pang and Tan 1983:231). They "decided that unions must be prepared to make short-term sacrifices for long-term gains" (ibid.). It meant that "they recognised that militant unionism must give way to social unionism, and confrontation had to be replaced by cooperation with management and government" (ibid.).

⁴ While a number of opposition parties contested elections and by-elections, the return of opposition to Parliament had to wait until 1981, when J.B. Jeyaratnam of the Workers' Party won a by-election to gain one of the 75 seats (Chan, 1982).

The attempt to 'modernise' labour was not easy, however. There was a considerable gap between the NTUC leaders and some branch unionists and rank-and-file members in understanding and accepting the new mandate (Deyo, 1981; Heyzer, 1983; Pang and Tan, 1983). Some branch leaders maintained their traditional role and "the national union headquarters [were] not always...successful in controlling grass-root militancy"⁵ (Heyzer, 1983:123). The economic downturn prompted by the oil crisis in the early 1970s did result in work stoppages (10 in 1972 and 1974) and workers continued to demand substantial wage increases and improved fringe benefits. However, the NTUC leaders played a disciplinary role on labour (Deyo, 1981:45-46). For example, in the period between 1974 and 1976, these leaders played an active role in persuading workers to accept smaller wage increments and in refraining from further demands for improved fringe benefits, saying that otherwise it would aggravate unemployment and they would not hesitate to act against such anti-social elements (ibid.). Those branch officials who went on to participate in strikes later resigned (ibid.). In 1974, the NTUC enhanced its disciplinary role by requiring all union negotiation claims to be submitted for approval to the NTUC disputes committee before being introduced into contract negotiations at the company level (Strait Times). As labour unions lost their traditional role in negotiating for the welfare of their members, union membership declined; from 114,000 in 1965 to 93,000 in 1968 (Pang and Tan, 1983:230). However, the NTUC regained its membership later by setting up cooperative enterprises and other social services that contributed to the welfare of its members (ibid.).

Industrial stoppages were largely eliminated by the late 1970s. This occurred in part, as Deyo (1981) and Heyzer (1983) suggest, because the re-orientation of labour centring on the NTUC had eliminated most, if not all, of the organisational bases for workers' to channel their dissatisfaction. However, it also seems that such dissatisfaction was gradually being offset by improved income, employment and social services. Even then, the problem of finding and nurturing a new group of leaders that

⁵ It was reported that "the employees often retaliate by resisting management in a variety of ways. Innovations and new methods of technology are not given a willing trial. There may be deliberate interference with production or operations, some subtle and some quite open" (Perjuangan, NTUC publication, Vol, 11. No. 8 August, 1975 in Heyzer, 1983:123).

was committed to the new mandate of the labour movement remained (Pang and Tan, 1983:233). This issue led to the replacement of the old generation of union leaders with new, more professionally trained leaders at the NTUC seminar in 1979 (ibid.:238). The explanation given by Prime Minister Lee Kuan Yew was that “the ‘old guard’ lacks the keen cutting edge of decisive minds and so fails to see the perils ahead amidst the present deceptive tranquillity” (ibid.). The president of the NTUC, Devan Nair, was elevated to the newly created post of President of Singapore and more professional unionists were brought in even from outside of the union, thus bypassing the traditional old union leaders (ibid.). The change of leadership in the NTUC, guided by the government, further enhanced the close link between the government and unions. Many of the NTUC leaders, or senior government officials, later came to hold or share posts in both organisations, further consolidating government-union relations. The domination of the PAP government and the cohesion among the political leadership was further consolidated by the overlapping leadership of the PAP, NTUC and the civil service. In February 1979, for instance, Lim Chee Onn was appointed as the First Assistant Treasurer when the second generation of leaders were co-opted into the Party’s Central Executive Committee. He also took over as Secretary-General of the NTUC, replacing Devan Nair (Kim, 1983:188). These appointments indicated the close link between the party, government and the main trade union (ibid.). The overlapping leadership and the rotation of key personnel, continues to be practised to-date.⁶

The change in the leadership of the NTUC also marked the establishment of collaborative efforts by unions to provide active support for broader national goals. The reorganisation was a process by which the government gained substantial autonomy from the traditional interests of labour. The process discussed above suggests that there had been a major difference in terms of the interests that the government and unions pursued. However, in the course of the government’s attempts to reorganise labour, the tight legal framework and the centralised structure of the unions (through the NTUC)

⁶ For example, in 1995, Lim Boon Heng was concurrently the Secretary-General of the NTUC and the chairman of the National Productivity Board, which was one of the key tripartite bodies promoting productivity. Prior to this appointment, he was second Minister of State in the Ministry of Trade and Industry (Goh & Green, 1997: 232).

encouraged workers to share the same pro-Singaporean interests as the government. As a result, the unions came to place Singapore's broader long-term interests first. Although the unions continued to play a major role in shaping the employment and wage system, their demands would no longer threaten the government's position which was to pursue the national interest. To be sure, the government practically always consulted with the unions on labour policies and issues. However, the historical evolution of labour organisation created a base that, unlike the unions in Japan immediately following the war, gave the government greater discretion in matters regarding employment and wage determination which conditioned the subsequent evolution of the skill development system.

7.1.3 Development of a fluid labour market: a basic condition for the externally oriented skill development system

The above discussion indicates that the government achieved a new system for government-labour collaboration. The government succeeded in reorienting labour to consider long-term interests (i.e. competitive national economy and better prospects for employment), when influencing the formation of the institutional framework for work (i.e. wages, employment practices). This power relation between the government and labour which was built during the first 15 years of Singapore's independence created the basis for the further evolution and functioning of the labour market. The removal of unions' legal right to fight against retrenchment meant that employment security could not be institutionalised (like the practice of long-term employment in Japan). In fact, a government official said at the time that "Singapore cannot afford to do so" due to the acute need for rapid industrialisation (Lim, 1998a). The fact that there was no single MP opposing the 1968 Employment Act indicated that the contestation of different interests was more or less over.

Combined with the regulation of labour activities, which catered largely to the needs of employers (and investors), other structural changes in the workplace shaped the labour market. This created a market with high labour mobility. The acute concern for rapid employment generation and industrialisation led the government to change the

rules to give significant discretion to employers regarding labour management, as discussed (e.g. Pang and Seow, 1983; Lim, 1998c; R. Chew, 1998). This made job security extremely vulnerable. The oil shock in the early 1970s resulted in the retrenchment of 20,000 workers in six months, largely in American electronics firms and in textile and woodwork factories, while further retrenchments continued until 1975 (Heyzer, 1983:110). The retrenchment figure in the worst affected industry (electronics) in 1974 also shows that the retrenchment was largely in US firms (67%) (Pang and Lim, 1977 in Deyo, 1981:81). Even though one could remain employed, most of these jobs involved repetitive work for long hours and MNCs tended to operate closely to the job contract and description. There was less room for personal relations to develop, in particular between managers and employees (*ibid.*). In the face of retrenchments, there were effectively no unions to fight to protect or negotiate the interests of the workers in the traditional way. Workers' response to employers' short-term commitment to them was less organisational attachment and frequent employment changes in search of better wages. One of the first official acknowledgements of the issue, so-called 'job-hopping', appeared in a guideline issued by the National Wage Council (NWC) in 1977. The issue continued to feature in its reports until the early 1980s (MOL, 1992).

Serious concerns over job-hopping led the government to commission a special study and the NWC introduced a number of schemes to curtail the practice.⁷ The problem of job-hopping was raised first from the point of the view of productivity and promoting training in the workplace. In particular, as Singapore attempted to rapidly upgrade its economy in the late 1970s, the importance of skills came to be highlighted and job-hopping was seen as a major impediment to the commitment of employers to train. When the government encouraged companies to invest in training, German and Japanese companies expressed their concerns over the training externality due to the problem of job-hopping (Lim, 1998c). Local companies were also concerned with the poaching of trained workers by other companies (*ibid.*). Given the urgent need for skilled workers to support the rapid upgrading of the economy, high labour mobility

⁷ For example, in 1977 the NWC recommended that employees with less than 12 months of service be denied the NWC wage increase, except for those who regained employment after being retrenched (MOL, 1992).

was one of the factors which prompted the government to find its own solution for developing workers' skills, rather than relying on employers' slow initiatives.

7.2 Relations with the business sector

The government has achieved, over time, not only the re-orientation of labour, but also considerable autonomy from capital. While the views and interests of (notably local) employers have been expressed on a number of occasions, they have tended not to have much impact, at least prior to the late 1980s. There are three main business groups in Singapore: i) large Chinese-owned enterprises which were operating prior to independence and are concentrated in the areas of food processing, textiles and banking; ii) multinational corporations, or MNCs; and, iii) a large number of small and medium enterprises, or SMEs, that were mostly owned by the Chinese (Chalmers, 1992).

The business community has been represented by a number of different organisations in Singapore. The traditional type of such organisations was formed along ethnic lines, such as the Singapore Chinese Chamber of Commerce and Industry. As discussed, this organisation played a prominent role in both the economic and social development of the Chinese community in pre-independent Singapore. One of the oldest business organisations is the Singapore International Chamber of Commerce (SICC) which was founded in 1837 and continues to represent mostly foreign companies (Tan, 1999:121). After independence, the Singapore Employers Federation, the National Employers Council and the Singapore Manufacturers Association (SMA) emerged as the main business organisations. The first two merged in 1980 to form the Singapore National Employers' Federation (SNEF), while SMA was reconstituted as the Singapore Confederation of Industries (SCI) in 1996.⁸

Despite this active level of organisation, there are several reasons which explain the limited influence of employers. First of all, the government has taken a pro-

⁸ These organisations have operated along with a number of business groups based on a company's country of origin. SNEF, SICC and SCI currently constitute the three main employers' organisations, with the former two having recently joined the new apex body, the Singapore Business Federation (ILO, 2005).

business stance since the country's inception. The government created a business-friendly environment to attract MNCs and thereby stimulate employment and economic growth. As shown, the Industrial Relations Act and Employment Act (1968) reinforced the power of employers vis-à-vis labour. The government in effect 'pre-empted' the role traditionally played by employers' organisations in the area of industrial relations.

Secondly, the composition of the various employers' organisations suggests that the interests of employers are diverse, reflecting differences in ethnicity, industry and nationality.⁹ For example, MNCs simply do not have as much of a stake in domestic politics as local firms, especially when the government has accommodated their interests as part of its industrial strategy. The diversified nature of the business community made it difficult for it to speak with a common voice.

Thirdly, the role of MNCs and well-established local enterprises was 'institutionalised' through their involvement in official bodies of tripartite negotiations such as the National Wages Council (NWC). The views of large national businesses have been represented at government level by organisations such as the Singapore Manufacturers Association. Chalmers states that these organisations are "well-integrated into local state structures, they are now part of the establishment and have little need for political activity to secure their interests" (Chalmers, 1992:69). There have been occasions, however, when established companies have been concerned with government participation in the private sector, notably in the banking sector (Rodan, 1989:109).

Fourthly, the limited influence of Singaporean-owned firms in policy relates mostly to their diminishing role in the economy since 1965 (Rodan, 1989; Chalmers, 1992; Chng, *et. al.* 1988). The government based its industrialisation strategy on attracting foreign firms. Local (in particular, manufacturing) capital was largely left behind and could not take a part in this new economic strategy in any significant manner without state assistance (Rodan, 1989:109). In addition local capital did not have a champion in the political sphere. After an absence, the Barisan Sosialis returned

⁹ For example, the National Wages Council did receive one position paper from each important employers' association (Lim and Chew, 1998:19). This approach contrasts with the union's 'unified' position paper that was prepared by the NTUC.

to politics at the 1972 election and based its election platform on the fight against the proliferation of foreign capital (ibid.:111). While the Barisan Sosialis and other opposition parties obtained a considerable share of the votes, PAP won all of the parliamentary seats (ibid.). The consequence was a diminishing voice for local business in policy-making. Through their organizations, Singaporean businesses attempted to defend their interests but were unsuccessful in changing the government's approach. As Chalmers writes:

Throughout the 1970s there were calls from business, the media, economists and various other interest groups for the creation of a separate department to assist local firms in the crucial learning stages before they could become internationally competitive...The Chinese Chamber of Commerce and Industry became an important source of opposition, and in late 1977 submitted a memorandum to the government [which was] highly critical of its development strategy...However, these protests were not able to alter the broad thrust of state policy (Chalmers, 1992:64-65).

Subsequently, the high-wage policy of 1979-1981, that facilitated the so-called 'second industrial revolution', shifted the base of the economy from labour intensive, low value-added manufacturing to high value-added production. The main casualties of the policy were overwhelmingly the smaller, local firms (Chng, *et al.*, 1988:65).

Summary

Singapore has been characterised as having a 'developmental state' which has played an instrumental role in leading the country's development process. The government's legitimacy and leadership have always relied on its capacity to deliver jobs, high living standards and economic prosperity. Without these promises being kept, it would have been difficult to achieve industrial peace, even with the coercion available to the government. Castells analyses the characteristics of the Singaporean state and of its development policies as follows.

PAP leadership always felt mandated with the historical mission of building Singapore as a nation, and to do it for the well-being of its people, whatever the distortions and social conflicts that grew up during the complex process of implementing this national design. In this sense, to understand Singapore it is indispensable to consider it as a showcase of a national liberation movement institutionalized in a nationalistic,

strong state that believes it cannot afford to make any concessions to either external or internal enemies in its struggle for survival in a merciless world.(Castells, 1988:42-43)

At the same time, however, the suppression of militant labour and the removal of anti-government activists and organisations in the early stage of nation-building, as well as the controlled participation of business, have created the basis for a unique tripartism that has supported the development of Singapore. Needless to say, the nature of this tripartism is very different from that which features in traditional industrial relations (and its often open conflict).

7.3 Re-shaping of the wage structure

The evolution of the wage structure in Singapore is indicative of the nature of the relationship between tripartite actors. Unlike Japan, where the seniority-based wage system was carried over –although with some modifications– from the pre-war to the post-war period, the wage system in Singapore changed drastically under the government's leadership. The arena for wage determination shifted from individual companies to a tripartite national body, the National Wage Council (NWC).¹⁰ The seniority-based system was widely accepted and practiced up to 1986 (R. Chew, 1998; Then, 1998). However, as the government responded to the challenge of raising competitiveness, it changed to a flexible wage system by the late 1980s (the details are provided in the next chapter). While the contested interests of stakeholders prevented a radical change in the wage system in Japan, the new system in Singapore changed existing practice drastically. The development of the wage system indicates the considerable autonomy of the state from other societal forces in reforming an existing institution.

Relative to Japan, the contestation of interests in the process of wage policy formation is subtle and not easily observable in Singapore. Since 1972, guidelines for the wage level and related matters have been formulated at a tripartite National Wage

¹⁰ However, since 1986, adherence to the wage guideline determined at the national level has been relaxed considerably and the discretion of employers, to reflect the performance of individual companies, has been emphasised (Lim, 1998c).

Council (NWC). It has been one of the NWC's primary policies that all deliberations, negotiations and compromises remain confidential to allow 'maximum freedom in deliberation...and [thus to help] reach a consensual agreement' (Lim, 1998a:22). Secondly, while the NWC provides an official institution for the government, employers and workers to express and negotiate their interests, the establishment of the NWC itself was, to a large extent, a political settlement of contested interests. Therefore, it is important to look at the role and operational mechanisms of the NWC to understand power relations between the various actors and the contestation of their interests.

As mentioned, a high rate of unemployment and an immediate concern for Singapore's economic and political survival prompted the PAP government to shift from an import-substitution strategy to an MNC-centred export-oriented strategy. A considerable number of MNCs were already operating in Singapore at the time, although they were mostly in capital-intensive sectors (notably petroleum refinement and chemicals) and their capacity for employment generation was limited. Thus, the inward investment of labour-absorbing industries (i.e. electronics, textiles, footwear) was promoted to address unemployment. In addition to industrial peace, the issue of wages was a major aspect of the effort to create a favourable business environment for foreign investment.

7.3.1 Prior to the establishment of NWC (1972)

There have been three phases of wage policy since independence. In the first phase, from 1965 to 1972, the wage level was restrained through a tightening of the legal framework for regulating industrial relations. Wage determination took place largely at the company level between individual employers and their employees. The passage of the Employment Act and the Amendment to the Industrial Relation Act in 1968 significantly narrowed the scope of action for union movements and formed the basis of an informal wage restraint policy (R. Chew, 1998). While most of the items for collective bargaining were removed, wage determination was left as a negotiable item between employers and unions. The unions' bargaining power regarding wages was severely limited, however, since the government was determined to rectify industrial

unrest and restrict the practice of industrial work stoppages (Deyo, 1981:47; Pang and Tan, 1983:230). Together with the call for industrial peace, the government called for wage restraint. Both were considered crucial for increasing foreign investment and creating employment.

The results of this strategy were impressive. Foreign investment surged¹¹ and the unemployment rate declined from 7.3% in 1968 and 4.8% in 1971 (R. Chew, 1998:95). While average earnings for blue-collar workers rose by 2% a year during the 1960s,¹² the annual increase during 1972-79 was 10% (Pang and Seow, 1983:165).

7.3.2 Wages under the NWC (1972 – 1986)

The second phase of wage policy began with the launch of the NWC in 1972. After rectifying the problem of unemployment through labour-absorbing manufacturing, Singapore began experiencing shortages of both unskilled and skilled workers (Chew and Chew, 1998:96). This put pressure on wages to increase as workers and their leaders felt that they were not adequately rewarded for the part they played in productivity and profit increases (*ibid.*). They felt that workers should be rewarded with a substantial increase in wages for their sacrifices over the past decade. The government, on the other hand, was still concerned with the negative impact of a substantial wage increase on foreign investment. In these circumstances, a wage forum in 1971 was called by Finance Minister Hon Sui Sen to discuss and allow orderly wage adjustments (Lim and Chew, 1998). The forum was organised on a tripartite basis with representatives from the government, employers and unions. The NWC was subsequently launched in 1972 as an advisory body for the tripartite partners to set national wage guidelines annually.

¹¹ Foreign manufacturing investment increased from US\$184 million in 1968 to \$515 million in 1969 (Buchanan, 1969 in Deyo, 1981:60). According to figures from the EDB and MTI, net foreign investment commitments in manufacturing increased from S\$156 million in 1972 to S\$247 million in 1975 and then rose further to S\$1.2 billion in 1980 (Heng, 1993).

¹² Although this was partly due to the excess labour supply and a large flow of low-wage foreign workers during that time, the wage restraint policy undoubtedly had a considerable impact.

7.3.3 Nature of the NWC

To understand the process by which different interests were contested and shaped the wage system, it is important to grasp the structure and unique characteristics of the NWC. The NWC is a non-statutory advisory body consisting of an equal number of representatives from the government, employers and the unions. The wage guidelines are decided on a consensus basis (not by majority vote), its guidelines are not legally binding (Lim, 1998a). However, a closer look at the role and operation of the NWC reveals its unique characteristics. The NWC was, first of all, set up by the government. Funding is provided by the Ministry of Labour (Lim, 1998a; R. Chew, 1998). The chairman is appointed by the government. Although his/her position is neutral, the chairman is proudly self-claimed as a pro-government Singaporean (Lim, 1998a:16). It is known that the chairman maintains close contact with the government through regular meetings. Representatives are chosen within each group;¹³ however their choices must be approved by the Ministry of Labour. Actual wages were negotiated and determined at the company level and so the NWC guidelines are used as benchmarks for company-level wage negotiations. Wage disputes were referred to the Ministry of Labour and the Industrial Arbitration Court as required by law (Lim and Chew, 1998). Technically, the Cabinet is able to reject or amend the recommendations of the NWC; however, every recommendation, provided annually, has so far received the Cabinet's endorsement. Thus, over the years the NWC guidelines have come to be perceived as the government's position (Lim, 1998a,c).

While the NWC was set up to ensure that workers receive an equitable share of the nation's economic growth, it also aimed to "prevent any counter-productive free-for-all scramble for wage increases" (Chew and Chew, 1998:96). Its modus operandi was, as stated by Lim (1998a), 'a pre-emptive resolution of conflicting wage claims and other related issues'. The NWC was in this sense an official device to allow the

¹³ The representatives from the government include four Permanent Secretaries of key Ministries. From the employers they included 10 representatives including American, German and Japanese MNCs (Lim and R. Chew, 1998). Most unions are members of the NTUC and thus workers' interests are represented through NTUC representatives.

government to pursue its economic strategy while controlling other societal interests, in this case the interests of the unions and, to a lesser extent, employers regarding wages.

7.3.4 NWC and unionism

This pro-Singaporean and pro-competitiveness principles underlying the NWC had significant implications for the development of the union movement. In practice, such principles meant that wage increases would not exceed productivity growth and would not compromise Singapore's competitiveness (Lim, 1998c). While the employment legislation of 1968 set the legal parameters for unions' actions, the NWC provided an operational parameter (i.e. channels and ways) by which wages could be negotiated. While officially including unions in the tripartite system, the NWC reduced their influence on wage determination outside of this formal structure. Amidst growing demands for substantial wage increases, the NTUC leaders played a disciplinary role (Deyo, 1981:45-46). Its leaders called for wage restraint and urged other unionists to refrain from making further demands for improved benefits in 1974-76 (*ibid.*). This suggests that the NTUC leaders and the rank-and-file unionists did not necessarily share the same views on wage adjustments. However, the operational structure of the NWC was set such that workers' interests were represented by the NTUC. The representatives were chosen from among the unions represented on the NTUC. Those unions which were not members of the NTUC were thus excluded from the official process of wage policy formation. The Amendment to the Industrial Relations Act in 1968 kept wage determination as a negotiable item for unions. However, the NWC-centred wage determination system effectively conditioned the role and functions of unions and contributed significantly to reducing so-called 'disorderly' wage claims and thus supported the creation of a favourable business climate.

7.3.5 High wage policy in 1979-81

The greatest indication of the shift from a company-based to a nationally-based wage system was the economic restructuring induced by the high wage policy of 1979-81.

Economic restructuring meant a substantial shift in competitive strategy from a low-value, wage and skills economy to a high-value, wage and skills economy (e.g. Rodan, 1989; Lim, 1998c). There was growing concern with the previous strategy as neighbouring countries with lower labour cost began challenging Singapore's competitiveness (e.g. *ibid.*; Low, 1993). By the late 1970s, Singapore had achieved near full employment, wages were rising and it was becoming difficult to pursue a low-wage strategy despite its ability to control wages.

Once the decision was made, the government acted swiftly and with strong determination. It deliberately promoted foreign investment in high value-added industries¹⁴ while encouraging the existing low value-added companies to increase the value of output. The wage policy was one of the major initiatives supporting this restructuring.

During 1979-81, the NWC supported economic restructuring by recommending a substantial increase in wages. In 1979, it recommended a monthly wage increase of S\$32 across the board (MOL, 1992). However, the increase in wages was most effectively achieved by an increase in the level of Central Provident Fund (CPF) contributions, as the NWC was concerned about the inflationary impact of a sudden rise in take-home income (Lim, 1998c). A drastic increase was made in the employer's contribution to the CPF from 16.5% in 1978, to 20.5% in 1979 and 25% in 1984. During 1979-81, the average nominal growth in monthly earnings went up by 13.4% per year as a result. However, the NWC also increased the level of employees' contribution (from 16.5% in 1979 to 22% in 1981) and, by doing so, kept the real wage increase to a modest 3% per year (*ibid.*; MOL, 1992).

The wage increase, by using the CPF, was more than a counter-measure for inflation. Due to the NWC's non-statutory nature, companies were not obliged to follow the NWC recommendations on wages; however, their contribution to the CPF was compulsory. In addition, given the need to have training facilities for unemployed people during the economic restructuring process, the NWC chairman suggested the

¹⁴ Eleven key industries were identified as high-skilled industries: automotive components; machinery and machine tools; medical and surgical instruments; chemicals and pharmaceuticals; computers and software development; electronic instrumentation; optical instruments and equipment including photocopiers; precision engineering products; advanced electronic components; hydraulic and pneumatic control systems; and other industries (Heyzer, 1998:112).

establishment of a fund for this purpose (Lim, 1998c:53). This led to the creation of the Skills Development Fund (SDF) and, for this, a levy (4% of the wage bill) was introduced (specifically on enterprises operating on a low-wage/low-cost strategy). As a result, the high-wage policy severely undercut the growth of low-wage industries.

While the re-organisation of the wage system had major implications for the unions, the high-wage policy was indicative of the government's stance towards the business community. The move indicated that while the pro-business attitude remained unchanged, the government played a proactive role in moulding the market by regulating industries so that they met Singapore's economic interests (e.g. Chen, 1983). The economic restructuring, in particular a shift of support to high value-added industries, indicated that the government's support for business was not based on the immediate interests of existing businesses, but on the long-term development of the economy. This suggests that the government had considerable autonomy from business and that its support for business was a means for achieving larger national objectives.

What the above analysis suggests is that the process of restructuring the wage system reflected power relations among the government, employers and unions. At least until the mid-1980s, the reorganisation of the wage system, which was central to industrial relations and the labour movement, was pursued by strong government initiative. Despite the non-statutory status of the NWC, it can be said that its tripartite nature was unique, as negotiations among the stakeholders were framed by the non-negotiable principle of pro-Singaporean interests. However, it is important to remember that the government has gradually won support from employers and unions. Most importantly, the idea of 'putting Singapore's interests first' was increasingly accepted and become the dominant framework for business and labour negotiations by the early 1980s.

As a result, the national system of wage determination increased government influence over wage determination at the company level. Chalmers (1967) noted that collective bargaining at the company level used to be more important than legislation, administrative action or the decisions of national arbitration courts; however this changed with the Employment Act of 1968 (in Deyo, 1981:47). The decisions of the Industrial Arbitration Courts, which tended to be based on considerations of power,

equity and ability to pay on the part of the disputants themselves, increasingly came to be based on the state of the economy (ibid.).

7.3.6 Implications for the skill development system

The changes in the wage system had several significant implications for the evolution of the skill development system. The first issue was the further cementing of the collaborative stance of unions, as their traditional role declined. As discussed, the specific mechanism for representing workers' interests through the NWC conditioned (narrowed) the scope of union's influence on wage policy. The weakening of the previous social associations (e.g. ethnic/dialect-based unions and other social associations) and the reorganisation of labour in part resulted in workers' reduced attachment to the company and in increased labour mobility (Moore, 1965 in Deyo, 1981). This created a major obstacle to enticing companies to invest in training.

The second issue is that the accelerated pace of economic development during 1979-81 substantially changed the skill requirements of the workforce and undermined the seniority-based system. The shift to high value-added industry required a workforce with higher and more up-to-date skills and knowledge, most of which were possessed by younger and more qualified workers. As part of the impact of rapid industrialisation, Heyzer (1983:120) has noted that "[i]nter-generational mobility is high as citizens with better education are drawn into the more affluent sectors of the economy". It is likely that the seniority system clashed with the flood of well-qualified young people and was gradually weakened, while the interests of the national economy supported the advance of those young people. By then the unions had been transformed so that the traditional approach to guarding the interests of older workers was weakened. In this situation the value of formal qualifications for gaining a high-wage job increased relative to the value of skills acquired in the workplace.

The third issue also relates to accelerated industrialisation and changing skills demands. The upgrading of the economy substantially increased the demand for professional and managerial skills (Bauer, 1998). This resulted in substantial increases in wages for those occupational categories and increased the wage differentials

between categories (Hayzer, 1983). This also increased the importance of pre-employment education, relative to post-employment skill development.

7.4 Education and training system

How formal education is articulated in work has considerable impact on shaping the skill development system. In Singapore, three characteristics need to be highlighted. The first is the close connection between the formal education system and the economy, so that the education and training system can be responsive to the needs of the economy. The close link between them has been manifested in the promotion of the English language and vocational and technical training (VET) in the formal system. The economic relevance of the education system not only enabled the government to promote investments in certain types of industry (Wong, 1993), but it also provided employers with an important business infrastructure as they could rely on the education and training system to accommodate their skill needs. Thus, the government's successful attempt to make the formal education system relevant to the needs of the economy created a skill development system in which public (or other forms of state-led) education and training, as opposed to in-company training, could play a leading role in the country's overall skill development.

The second feature is the introduction and cultivation of the idea of meritocracy, among the workforce, through the education system. While the idea of meritocracy was introduced as an egalitarian concept –providing an equal footing for competition regardless of background– the idea was also used to increase 'efficiency' in the investment of education by providing a rationale for streaming and the early selection of the students by merit (introduced in 1979). The idea was carried over to the workplace to support the placement of better educated young people in middle-and-above posts, in particular during 1979-81, as companies required skilled workers to cope with the rapid upgrading of their operations (Heyzer, 1983). The promotion of meritocracy also facilitated an increased correspondence between type of occupation and educational attainment. When this change partly contributed to the decline of the

seniority-based wage system, blue-collar workers lost an incentive for long service to the same company, thus contributing to high labour mobility.

The third feature is the inculcation of appropriate values and habits through schooling. Despite the mixed evidence of its effects (Gopinathan, 1997:48-49), civic and moral education, provided overtly and covertly at schools, has contributed to the cultivation of certain attributes among young people that support the maintenance of the existing authority and social systems. These attributes include tolerance of other ethnicities (thus multiculturalism); however, they also include “docility, obedience to authority and acceptance of hierarchy”, along with, “disciplined work habits, competitiveness and responsiveness to incentives” which are conducive to the development of an industrial economy (Pang and Lim, 1997). Chen (1976) also points out the existence of a political culture that discourages conflict, confrontation and bargaining (in Gopinathan, 1997). Notwithstanding the difficulty of assessing the effect of schooling, value education has had an important role in the construction of the dominant mental framework that underpins the social system (i.e. industrial relations) which Singapore has come to develop.

Another element is the inculcation of what Joy Chew (1998) calls a strong economic morality, which encourages individualism, competition, inequality and self-interest, and has been facilitated through the competitive and meritocratic education system. While value education also promotes a social morality of cooperation and mutual supportiveness (*ibid.*), some have observed that this has come short of what value education had intended (Peck *et al.*, 1992 in Gopinathan, 1997:49). When the economic reality is such that it mirrors, or enhances, the economic morality cultivated at schools (and other means of education such as media, family, etc.), such morality is likely to be carried over into the workplace. This morality further underpins the work ethic which, in Singapore, has endorsed the pursuit of self-achievement, self-interest, meritocracy and economic rationality (as long as they do not threaten the interests of Singapore’s economic development). This type of morality, however, may conflict with organisation-based cohesion, attachment and collaborative work.

The following section examines the processes by which each characteristic discussed above has come to develop in the formal education system. Similar to the

Japanese experience, the shaping of the education system in Singapore was also affected by the contested interests of the stakeholders. However, the difference in Singapore is that these contested interests were gradually moulded and streamlined by higher national goals pursued under the leadership.

7.4.1 Education system responsive to the economy

With limited natural resources, the government focused on the education system as a major vehicle for national development from the outset. The idea that, “[f]or a small nation such as Singapore without a lot of natural resources, the importance of investing in human resource development cannot be over-emphasised...It is not surprising, therefore, for Singapore to place such high priority on education” was put forward by the government from the beginning and it was largely accepted (Wong, 1988:ix). Unlike in post-war Japan, there was no major questioning of linking education to either economic development or nation-building; instead, it was seen as vital and necessary to do so. Unlike post-war Japan, the acceptance of this principle allowed the formal education system to develop closely in line with the needs of the labour market.

Promotion of English education

The first step towards making the education system relevant to the economy was through the promotion of the English language, despite its link to the colonial period. It was an unnatural move to do so in a nation where 75% of the population was Chinese, 14% Malay and 9% Indian (1957 census, Dept. of Statistics, 1983). However, when the government embarked on an economic strategy based on export-oriented manufacturing with heavy MNC investment, the value of the English language as a link and a commercial language was unquestionable. Since human resources were practically the only resources available, the promotion of the English language became important to the educational agenda of the new republic.

Language policy in Singapore had been, however, a matter of high politics since the colonial era. For non-English speaking groups, however, English was the language of the colonial authority and thus anti-national (Gopinathan, 1999). Not only did it

reflect the colonial cultural and linguistic tradition, but also it was seen to exacerbate the cultural and economic disadvantages of non-English groups¹⁵ (ibid., 1974). Resentment among the Chinese community was most pronounced, as the colonial government did not provide any support to the community's education while it did support English and Malay schools¹⁶ (Wong, 1988:4). Later, the colonial government offered the community some financial aid, however the community refused as it feared the government's interference (ibid.; Gopinathan, 1974). In the face of increased politicisation among Chinese youth, an All Party Committee was formed in 1955 to discuss Chinese education (ibid.). The committee recognised the need to tackle the issue in the wider context of its language policy, involving schools of other languages, and recommended the principle of equal treatment for schools of all languages (Gopinathan, 1974). However, Singapore's attempt to be allied with and join Malaysia in the early 1960s swayed the politics of language in favour of Malay as the national language although it maintained the principle of equal treatment for other languages. The move further threatened and frustrated the largest racial group in Singapore, the Chinese (ibid.). On the other hand, the Malays were rather sceptical of such a move, claiming that the government was not being sincere enough in advocating Malay as the national language by not making it the sole national language (Gopinathan, 1974:36). Both Malay and Chinese teachers' unions actively participated to the debates (ibid.: chap 4). A study report on Chinese education commissioned by the Chinese community (Fenn-Wu Report) at that time states that the language of the majority had to have due recognition (Gopinathan, 1974:22). When such frustration was translated into the intensified politicisation of Chinese schools, largely instigated by the Malayan Communist Party in the mid-1950s, the colonial government responded with the closure of some schools (ibid.:25).

Despite the suppression, the frustration of the community lingered on, and it was only in the mid-1960s that the Ministry of Education was able to assert the right to determine what was to be taught in Chinese schools (Wong, 1988:6). The resentment

¹⁵ The civil service and the large agency houses that controlled the economy were dominated by the English-educated. Chinese-educated graduates in the years prior to and soon after the war had few vocational opportunities (Gopinathan, 1996:3).

¹⁶ The Chinese were left very much to themselves. Chinese schools were established and maintained by individuals, societies or clan associations (Wong, 1988:4)

towards English education continued to be high, despite the principle of equal treatment. As late as 1963, a report by a committee led by the Chinese Chamber of Commerce pointed out the favouritism towards English education (and the fact that English enjoyed a very high status in politics, commerce, society and access to higher education). The report stressed the importance of the provision of employment opportunities for Chinese medium-school pupils (Gopinathan, 1974:39).

Despite considerable opposition, the new independent government “set about widening access to English rather than limiting its role in schools to placate the politically powerful Chinese-educated lobby” (Sharpe and Gopinathan, 1997:373). This was due to the following economic and political reasons.

First of all, from the outset, the government was aware of the usefulness of English as a language for commerce and industry, and thus essential for rapid industrialisation and economic growth. As the government began the process of industrialisation based on the substantial investments of MNCs, the English language provided the city-state with a competitive advantage in attracting foreign investments over non-English speaking neighbouring countries. The government’s explanation was as follows:

This fundamental change in our policy of industrialisation geared to a world export market...had many consequences. One of them was its impact on education. ...It also meant more widespread use of English for this is the language of the investing industrialists, whether American, Japanese, German, Swiss, French or British (Lee, 1972, quoted in Gopinathan, 1974:59).

Secondly, the English language was seen by the government as an agent for the promotion of multiculturalism, thus the construction of a cohesive nation with relatively peaceful racial relations. It is worth recalling that the events prior and immediately after independence heightened racial tensions and led to major racial riots. At the time of independence, neighbouring nations feared that the Chinese predominance in Singapore would make Singapore the ‘third China’. This led the government to think that “assimilation into the majority culture [and language] was obviously not a feasible option” (ibid.:47). The government chose, instead, to set Malay as a lingua franca for all Singaporeans, while making Chinese, Malay, Tamil and

English official languages. At school, all of the languages were endorsed as media of instruction.

The serious racial divisions were also an urgent issue from the perspective of economic development. Along with labour unrest, the racial issue was another source of social unrest (largely as a result of resentment, frustration and disillusionment among Chinese youth). As this was a serious impediment to the creation of a favourable investment environment, the racial issue was high-stakes and thus the language policy was a prime means of promoting a peaceful, cohesive nation.

The government has never compromised the pursuit of English education, however. The government took steady and decisive measures for its promotion. In the year following independence, the study of a second language became compulsory and it was included as a subject to be taken in the Primary School Leaving Examination (PSLE) (Gopinathan, 1974:43). The policy also required that science and mathematics be taught in English (Wong, 1988). While the first and second languages were allotted double the weight of marks for math and science in 1973, in addition equal weight was given to the two languages in the PSLE in 1974, making the mastery of English even more important (*ibid.*; Gopinathan, 1998). When less than 1% of the cohort enrolled in Chinese medium schools in 1983 (due largely to the perceived disadvantage of not being able to learn English), the government announced that all pupils would be taught English as their first language by 1987 (*ibid.*:28).

This triggered a public uproar among the Chinese community; however the fury did not last long. There was “the realisation that a long era had come to an end and that the Chinese system had finally lost its relevance...English had won out as the dominant political, economic and now, education, language” (*ibid.*).

While the government did not compromise the importance of English as an important economic language, the shift to English education came also as a result of parents’ response to incentives provided by a changing socio-economic environment (Gopinathan, 1974, 1996 and 1997). As the economic transformation, based on the MNCs-centred competitive strategy, proceeded, the utilitarian value of English increased and thus the English language gradually became an overarching common language used by all racial groups (*ibid.*). As the socio-economic structure was

transformed in favour of the English language, enrolment in non-English primary schools declined. The government maintained that “the continued use of English and its spread means continuity in the records, administration and law, and...English provides a medium in which all racial groups compete at par with each other” (Gopinathan, 1974:48).

When streaming was introduced in the school system in 1979, one of the important criteria was students’ bilingual ability. This streaming separated students into academic and vocational routes and thus largely determined their future career prospects. Thus when the English language became a crucial part of academic merit in Singapore, which would guide the future course of academic and employment careers, the value of English became unquestionable. In 1959, only 47% of children entering primary schools registered in English schools, the equivalent rate rose to 91% by 1979 and more than 99% by 1983 (Wong, 1988:7, 21).

Until the present day, the English language has continued to provide an economic advantage to the Singaporean economy while indirectly supporting the development of an important business infrastructure (i.e. a relatively peaceful society).

Expansion of vocational and technical education and training

The rapid development of vocational and technical education and training (VET hereafter) is also important for understanding the economic relevance of the education system in Singapore. Once the importance of the ET system for the economy and thus national goals was accepted, there was no major resistance to the government’s attempts to enhance VET as there were in post-war Japan.

The need to develop a strong technical skills base was recognised by the government from early on. The main government offices took charge of this task, including the Ministry of Education and the Economic Development Board (EDB). The latter was established in 1961 to develop a strong manufacturing sector that could reduce unemployment (Chiang, 1998; Wong, 1993). At first, the approach taken was to strengthen technical education and training within the formal education and training system. EDB initially developed six training centres¹⁷ with financial and technical

¹⁷ These were: 1) The Metal Industries Ltd; 2) The Prototype Production and Training Centre; 3) The

assistance from both international and bilateral donors in 1968. However, the mix of different kinds of machinery from different countries (donors) and the use of different training approaches made management of the centres difficult (Chiang, 1998:101). Meanwhile, the Ministry of Education's efforts were accelerated by the establishment of the Technical Education Department (TED) in 1968. With the withdrawal of the British naval forces in the same year, TED and EDB jointly offered a number of technical training programs (including metal work, machine turning and fitting and radio maintenance and repair) to retrain nearly 9,000 people who had been working at the naval base (Wong, 1993). The results of this early effort to boost the level of technical skills were not all favourable, however. The number of people trained was small: only 86 graduated from the EDB's six training centres despite S\$12 million being invested over four years; and only 1,749 people were trained through the EDB-TED programs over four years, all at the elementary level (Chiang, 1998:102).

These experiences led the EDB to go beyond the normal technical education institutions in an effort to cope with the increased demand for technical training (ibid.:103). The EDB approached and helped large MNCs set up their own training centres, with a view to using them as the basis for strengthening further its own technical education and training system. The first example of such government-MNC collaboration in training was the establishment of the Tata-Government Training Centre in 1972 (Wong, 1993). The Tata-Goup of India was a manufacturing company and the EDB was encouraging the company to set up a precision engineering plant in Singapore. Chiang succinctly summarises how this event took place:

In subsequent negotiation, the EDB seized the opportunity to help Tata set up such a training facility –to train not just sufficient numbers of workers for the Tata plant, but double this number so that the extra workers could meet similar manpower needs of other factories. As a sweetner, the EDB offered to provide the land and buildings for the training centre. In addition, the EDB would provide some \$1.5 million for equipment and machinery and cover 70 per cent of the operating costs of the training centres (Chiang, 1998:104).

Following this pattern, the EDB secured similar agreements with other MNCs. An agreement with Rollei-Werke, the German camera and optical manufacturing company,

Electro-Mechanical Training Centre; 4) The Electro-Chemical Engineering Centre; 5) The Woodworking Industries Ltd.; and, 6) The Precision Engineering Development Centre.

led to the establishment of the Rollei-Government Training Centre in 1973. A similar agreement with Philips, the Dutch electrical manufacturing company, resulted in the establishment of the Philips-Government Training Centre in 1975.

These joint initiatives contributed much to the strengthening of the formal system of technical education and training. Because the programmes of these centres required in-plant training after completion of two-years of in-centre training, they evolved into an apprenticeship system (Wong, 1993:247). Many of the courses and curricula developed by the technical experts seconded from the MNCs were subsequently adopted by vocational institutes (Chiang, 1998:105).

TED was upgraded to the Industrial Training Board (ITB) in 1973, which introduced the National Trade Certificate (NTC) and the public trade test system which enabled workers to gain formal recognition for skills they acquired on the job. ITB was later merged with the Adult Education Board to create the Vocational Industrial Training Board (VITB) in 1979, which further strengthened formal technical education and training (Chiang, 1998:34-44).

What is notable is the government's determination and its relentless innovations in promoting VET, even if it meant expanding outside of the school system when the initial effort at the school level was unsuccessful (Gopinathan, 1997). This provides a sharp contrast to post-war Japan where fierce resistance from the teachers' union and its sympathisers made an explicit link between education and the economy impossible and resulted in an underdeveloped public VET system.

7.4.2 Development of the meritocratic system

Another important feature of the skill development system in Singapore is the notion of meritocracy. The conceptualisation of such a notion was significant in the Singaporean context, as it rationalised the restructuring of the ET system to introduce differentiated routes for education based on students' ability (rather than just offering a unified standardized route). Here, it needs to be acknowledged that the term 'meritocracy' is used differently than in the case of Japan. As discussed below, meritocracy in the Singaporean context is based on the recognition that there are innate differences in

children's capacities to acquire knowledge. This contrasts sharply with the concept of meritocracy in Japan which denies an innate difference and provides egalitarian, unified schooling in which merit (outcome of learning) reflects largely the quality of teaching and the amount of hard work that students put in (see Chapter 4, sec. 4.2.2).

The education reform in 1979 was an important policy measure which formalised the concept of merit. The reform was based on a report by the Ministry of Education (the so-called Goh report) by the Educational Review Committee led by Deputy Prime Minister Goh Keng Swee in 1978. The committee was formed to address the efficiency of the education system and in particular to assess the effectiveness of the bilingual policy. It reported an alarming situation of what the report called the wastage of education. More than 60% of the pupils who sat the PSLE and O-level examinations failed in one or both languages while school drop-out rates were 29% at the primary and 36% at the secondary level (Gopinathan, 1998; Wong, 1988). It also pointed out the ineffectiveness of a single curriculum for all (Wong, 1988). The government's solution to the problem was the introduction of streaming in primary and secondary schools by differentiating students on the basis of ability. It was a significant move in terms of the development of meritocracy, as the move not only underpinned the prevailing conception of ability (which accepted differences in innate ability) but also, by bring streaming into the school system, it institutionalised the notion of merit. The concept of merit was clearly expressed by Lee Kuan Yew:

the younger generation in Asia is no longer stirred by the simple slogans of an egalitarian society: more and more, the young are showing that they can strive to be unequal. What they want is not to be equal throughout life but to have equal opportunities so that those whose ability and whose application are better than the average can become more equal than others (Lee Kuan Yews, Speech at the Council Meeting of the Socialist International, Zurich, 1967, quoted in Heyzer, 1983:389).

In discussing the problem of the existing system, the Goh report noted that;

the existing 'single curriculum (6-4-2)' which required all children to cover the same syllabus within the same period and to sit for the same examinations, did not take into consideration differences in absorption capacities and rates of learning...The high failure rates at the PSLE and

the O-level exam¹⁸ could be reduced with an education system sufficiently flexible to cater for children with different abilities –in other words, by streaming them into different courses according to ability (Goh, 1979, reported in Wong, 1988).

In concrete terms, the reform introduced streaming from P4 onwards based on the exam taken at P3 in math and language (Gopinathan, 1999; Wong, 1988). Students were streamed into three different courses, one in which they studied the first and second languages at the first language level (Normal course), and the second in which they studied the first and second languages (Extended course) and the third in which they studied only the first language (monolingual course). As the PSLE required the second language, vocational routes were recommended for the third stream students. Based on the result of the PSLE exam, where the first and second languages had equal weighting, students were divided into three streams at the secondary level.

The introduction of streaming met with considerable anxiety and resistance by parents. As streaming was closely linked to students' bilingual capacity, the streaming issue once again revived language politics. The major concern was the reduced access to higher education for those who were placed in the monolingual course and the accuracy of the streaming such that those who were wrongly assigned to weaker streams would be demoralised (Wong, 1988:19-20). The concern was particularly paramount in the Chinese community. A study reported the importance of family environment as the most crucial criteria for language attainment (Gopinathan, 1974). This implied that students from Chinese-speaking homes tended to have a disadvantage over those from English-speaking homes in terms of language capacity, and now the weakness of language capacity would lead students to be placed in weaker streams (Gopinathan, 1998). Another concern stemmed from the narrow concept of ability which focused on language capability for primary level streaming. It was also argued that not all academically strong students were strong in language and streaming at P3 was too early (*ibid.*). The argument, based on egalitarian philosophy, of not recognising differences in human ability (similar to that of Japan) was also put forward and used to argue for equal education experiences for all students (Wong, 1988).

¹⁸ In 1976, the failure rates for the PSLE and O-level exam were 41% and 40%, respectively (*ibid.*)

These concerns were refuted by the government. The government stated that “egalitarian models that did not recognise innate differences in children’s capacities to acquire knowledge produced a system where only the brightest 12% to 15% of children could cope” (Goh report 1979, reported in Sharpe and Gopinathan, 1997:374). The report also stressed that ‘efficiency’ in the education system was a prime concern given the Singaporean situation, and implied that Singapore could not possibly afford to have such an egalitarian system. It noted that “for a country like Singapore whose only resource is its people, it is crucial that education wastage be minimised” (Wong, 1988).

This drive to increase efficiency in the system was also enhanced by the formal introduction of manpower planning with the establishment of the Council for Professional and Technical Education (CPTE) chaired by the Minister for Trade and Industry in 1979. The CPTE projects and recommends enrolment targets for universities, polytechnics and vocational and technical institutes as well as the EDB’s training institutes (Wong, 1993:254). While it was intended to ensure an adequate pool of trained professional, technical and skilled manpower, the coincidence between the introduction of formal manpower planning and streaming in the education system cannot be overlooked. To address the concern over the accuracy of streaming and access to higher education, the government assured a second and third chance for students (e.g. only those who failed both the P2 and P3 exams and the intelligence test would be placed in the monolingual stream), and brought flexibility into the system (allowing lateral transfers across courses later) (ibid.).

As a result, despite considerable tension and anxiety, the new system went ahead. While the strength of the government’s effort to launch the new system was definitely a strong factor, it appears that the absence of an organisational basis (i.e. political parties and unions) for effective opposition to mobilise the anxieties of the opposition was another factor which allowed the reform to proceed in the end. There was no equivalence to the Japan Teachers’ Union (*Nikkyoso*) which guarded the egalitarian model of education. The language issue had been previously used to agitate and mobilise national sentiments, especially among the Chinese, but in the light of decreased enrolment in Chinese medium schools, such sentiments were perhaps no longer enough to organise an effective opposition.

Despite considerable controversy, the introduction of streaming was, on the other hand, extremely successful in terms of improved student attainment and thus efficiency in the education system. While more than 60% of the pupils who sat the PSLE and the O-level examination failed in one or both languages prior to streaming, in 1984 which was the first year for Extended course pupils to sit the PSLE, the overall percentage passes at the PSLE in English and the second language were 85.5 and 98.7%, respectively (Wong, 1988:26). The pass rate of O-level exams improved from 41.2% to 52.4% in the first year for students who were streamed into the Express course and participated in the examination. The drop-out rates fell sharply to 8% from 29% at the primary level among the first cohort of the streaming system, while at the secondary level, the rate was further reduced from 36% to 6% (ibid.:28). These results were powerful evidence which endorsed the government's view of meritocracy and its concept of ability; they appeared to have a strong impact on the importance of merit in society. Even today excess competition and examination pressures are major issues in the education system in Singapore: "society puts up with it because it is a tool of the meritocratic selection process...The talented poor, if they are successful, can and do obtain social mobility via the education system" (Gopinathan, 1996:8).

7.4.3 Implications for the skill development system

The implications of the development of meritocracy for the subsequent evolution of the skill development system can be discussed in several ways. The level of education among the workforce increased rapidly from the early 1980s and Singapore has developed a highly efficient system that has produced impressive education results and has met the needs of rapid industrialisation and economic growth (see also the next chapter).

The ability of the formal education system to respond to the needs of the economy was achieved to a great extent. An important implication for the subsequent development of the skills system in Singapore was that this greatly enhanced responsiveness of formal education and training increased the importance of learning in formal institutions and of gaining qualifications. As the notion of meritocracy

prevailed, the correlation between education qualification and type of occupation has increased. The close link between education attainment and occupation favoured well-educated young people entering professional or middle-and-above positions at work, even though it meant by-passing those experienced workers with long service. As the difference in ability was stressed, merit (such as educational qualification and job performance) has taken primacy over the old proxies for competency such as seniority and long-service. As the correlation between education qualifications and average income has increased (Rao, *et al.*, 2003), the value of qualifications has been further enhanced. While this did not mean that individuals did not engage in non-formal learning in the workplace, the increased value of formal qualifications further contributed to the importance of learning in formal institutions, as opposed to in-formal learning including learning at work.

The formal system and other training institutes became something that employers could rely on to meet their skill needs. This employer's reliance also contributed to the importance of formal education and training institutions in the overall skill development system.

Despite the considerable achievements discussed above, the more efficient system has led to the creation of a pool of workers who cannot cope with the system. Under the efficiency-driven system based on tracking and promotion, "those who failed to make the grade at the PSLE, which was used for selection to secondary school, left the system and only some went onto vocational institutions" (Gopinathan, 1999:297). While the education attainment of the younger cohort improved substantially, the retraining of older workers has been an on-going concern.

The inequality in attainment among the workforce has made it difficult to apply uniform training for a large number of employees (Ashton and Turbin, 1995) and this was reported as one of the bottlenecks for the adoption of Japanese-style informal OJT. As a high diffusion of strong general skills in the Japanese workplace supported the practice of organisational learning (i.e. sharing skills and knowledge for example between managers/engineers and shop-floor workers to work together to tackle technical problems), a considerable skills gap (exemplified in the level of education) among different occupations likely poses difficulties in this regard.

While the promotion of meritocracy might have been an efficient and perhaps necessary measure to support the development of human resources, retraining and the upgrading of skills for those who are left behind by the meritocratic education system has become a major task for the government.

Conclusion

For those who are familiar only with the contemporary picture of Singapore, the common images of its institutional framework for skill development may include disciplined labour, close government-labour relations, the corporatist structure of wage determination and an efficient education and training system. However, a close analysis of the processes shaping these institutions reveals that they developed, as in the case of post-war Japan, as the outcome of contestations, notably in the pre- and early independence periods, of the interests among the government, labour and, to a lesser extent, employers. The government effectively depoliticised militant labour by a combination of legislation, coercive measures and cooption. Labour's participation in social dialogue has well as that of local capital, was confined to government-led tripartite forums. This initial political settlement conditioned the future course of tripartite relations and social dialogue. For the development of the education system, ethnic-based associations and parents also played an important role. Prior to and during the first decade after Singapore's independence, the differences among stakeholders were wide and complex. Thus if the above images do characterise contemporary Singapore, one must say that Singapore has come a long way. What affected the outcome of such contestation were the power relations among the government, employers and labour. Contrary to the experience of post-war Japan where initially a relative balance of power existed between tripartite actors, in Singapore a determined government rose to regulate, and eventually win the active support of labour and other actors.

The formation of skills-related institutions, namely the employment and labour market structure, the wage system and the education and training system, took place

with strong government initiative and reflected broader national interests. Other immediate and societal interests took secondary place, as a result.

The critical decisions and strategies taken by the government created the conditions for the evolution of the skill development system in Singapore. This chapter discussed how the pro-employer (pro-MNC) strategy to rapidly reduce unemployment and achieve economic growth led to the formation of a fluid labour market. Employment legislation that supported employers, combined with measures to severely weaken confrontational labour organisations, made employment insecure and uncertain for many workers. The wage system was changed to put national interests first. With little incentive to stay with one company, workers changed jobs frequently for better opportunities. High labour mobility made it difficult for employers to commit themselves to substantial employee training and thus investment in training by companies, including MNCs, was limited at least until the early 1990s.

Education was an important part of the strategy for nation-building and economic growth from the outset. By linking to a broader economic and employment strategy, the government aligned, through manpower planning, the supply of education and training with the needs of the labour market (and economy). The introduction of streaming in the formal education system contributed to the efficient supply of qualified young people needed to meet the increased demand for skills in the economy. As well-qualified young people came to occupy middle-and-above positions at work, the value of qualifications in career change and development increased. The improved responsiveness of the formal education system contributed to employers' confidence in the system as a source of skilled personnel. Altogether, learning in formal education and training institutions (which lead to a qualification) has come to play a central role in the skill development system in Singapore. The following chapter investigates further the evolution of institutions and the broader skill development system from the mid-1980s onward.

Chapter 8 Fostering a system-wide approach to skill development under the social pact (early 1980s – present)

The skill development system was set on course by the end of the 1970s. It was based on the political settlements reached in the 1970s between contested interests in society (largely between the state and labour unions but also other social actors like parents). What emerged was a consensual tripartism that was essentially state-led. The MNC-centred growth strategy began to bear fruit for the nation, in particular after the accelerated economic restructuring and the high wage policy of 1979-81. Economic restructuring successfully shifted the base of the economy from labour-intensive production and low wages to high value-added production and technology. Meanwhile the government tightened its grip in the political and economic spheres, as it saw social stability as vital for its growth strategy. A social pact emerged in which this political leadership was supported and legitimised by the populace in return for its ability to provide employment and economic prosperity. This has become *de facto* Singapore's version of a social pact between the state and labour, or broader society.

A succession of economic challenges faced by the country since the 1980s solidified this basic framework. The skill development system continued to be shaped by the discourse of economic and labour market strategies, adopted by the government but with the support of social partners. This was partly because skill development was at the heart of practically all economic strategies that the government employed. As part of such strategies, several critical decisions were taken, notably the pursuit of meritocratisation in the workplace and the adoption of the flexible wage system. This enhanced the already fluid and external nature of the labour market. These characteristics counteracted the government's effort to entice employers to train, and

instead, increased the need for the government to take a lead in skill development. The chapter demonstrates, however, that after years of determined intervention, the government has made substantial progress to entice employers to invest in training. The labour unions have been a major player in promoting training, and, as a result, Singapore has built a comprehensive skill development system supported by tripartite actors.

The chapter aims to demonstrate the process by which Singapore has come to consolidate the state-led skill development system, while overcoming a number of economic difficulties and solidifying state-labour (society) relations. It begins with an analysis of the process of restructuring the wage system which resulted in enhancing the external characteristics of the labour market. Such characteristics provided the basic condition for a greater role of formal or state-led education and training institutions in the overall skill development system. The section is followed by an analysis of the process by which a greater responsiveness of the formal system to meet the needs of the economy was enhanced. The third section focuses on how the government endeavoured to increase investment and participation in training in the workplace. The final section discusses the current challenges that the government faces. It argues that while the existing state-led framework seems to be at odds with the new skills requirement, there is too much at stake to embark on a fundamental change.

8.1 A shift to a flexible labour market: the basic condition for a greater role of the formal/pre-employment training

The economic recession in 1985 marked another watershed for the Singaporean economy and triggered another re-direction in economic strategy and a re-shaping of the labour market. The Singapore economy exhibited robust growth since independence in 1965. The economy marked eight consecutive years of double-digit growth between 1966 and 1973. Although the economy experienced recession in 1974 and 1975, it recovered quickly to achieve average annual growth of 8.5% between 1976 and 1984 (Rao *et al.*, 2003)¹. However, the economy plunged from a GDP growth rate

¹ The unemployment rate was reduced from 8.9% in 1966 to 2.7% in 1984 (Rao *et al.*, 2003).

of 8.3% in 1984 to -1.6% in 1985 (Ministry of Trade and Industry, 1994). While unemployment was virtually eliminated (a mere 2.7% in 1984), the recession led to many retrenchments in particular of older workers (Bauer 1998:258). This contributed to a fear of a resurgence of high unemployment². The record of zero industrial stoppages since 1978 was interrupted when 61 workers went on strike in 1986 (MOL, in Lim, 1998b:29). The recession challenged the government yet again to review its economic strategy.

The recession was linked to multiple factors. It was partly due to the decline in refined oil exports; the decline in primary products exports from neighbouring Southeast Asian countries; and the property slump in Singapore in 1985-1986 (Lim, 1998c:56). However, high wages, which exceeded productivity growth, were by far the most highlighted cause of the recession (ibid.; I. Chew and Tan, 1998:269). The Economic Committee, which was formed in 1985 to analyse the problem and propose the way forward, stated that "high wage costs together with rigidities in wage structures were partly responsible for Singapore's loss of competitiveness and for the prevailing recession" (Economic Commission, 1986:6, in ibid.). The report stressed the importance of increasing 'flexibility' in the wage system.

The issue of wages was again at the centre of the debate on Singapore's competitiveness. While the high-wage policy of during 1979-1981 contributed much to economic growth, high wages were now considered as major obstacles to sustained growth. This time the issue was not only 'high wages' but also 'rigidities' in the wage structure. The rigidities were associated with the seniority-based wage structure which was used by most companies at the time (Lim and Chew, 1998). The wage structure originated from the salary scales used by the British colonial government to pay civil servants, which were gradually diffused among enterprises (Then, 1998:224). The typical wage structure was based on long salary scales with pre-determined wage increases. As a result, wage differentials by age were large and it was believed that the salary at the maximum end of the salary scale exceeded the value of the job (Bauer, 1998:258).

² In fact, the unemployment rate rose to 4.1% in 1985 and 6.5% in 1986 (Ministry of Trade and Industry, 1994:53).

To overcome the recession and to increase investment, the government opted for severe cost-cutting. These measures included a cut in the company tax rate from 40% to 33%, a cut in the employer's CPF contribution from 25% to 10%, the removal of the old payroll tax of 2% and a cut in the SDF level from 4% to 1% (Lim, 1998c:58). Workers experienced a reduction in real gross wages of 3.9% in 1986 and again of 3.9% in 1987 (*ibid.*). The National Wages Council (NWC) recommended a wage freeze in 1986. The combination of reductions in wages and in the employer's contribution to the CPF represented a 20% pay cut across the board, and Chew and Chew (1998:104) have commented that "no country has succeeded in instituting such a policy of a drastic wage cut without any social unrest".

Another important change was the shift to a flexible wage system led by the NWC. The Council set up the Sub-Committee on Wages in the following year in 1986. It proposed to introduce a flexible wage system (Chew and Tan, 1998:269). While the above cost-cutting measures were a short-term solution to overcome the recession, the shift in the wage system had long-term implications for the skill development system. The NWC stressed that wages should reflect the value of the job, companies' productivity growth and profitability (MOL, 1992). The flexible wage system meant that wages consisted of a basic-wage component (with seniority-based annual increments) and a variable annual bonus which were determined by companies' profitability and workers' performance (Bauer 1996: 601). However, one of the main objectives was to reduce the importance of age in determining wages so that wages would not exceed the value of the job (*ibid.*). The NWC recommended that a reasonable ratio between starting and maximum salaries would be 1.5 (NWC, in Bauer, 1996).

While an interest in maintaining the status-quo prevented most companies in Japan from making drastic changes to the wage system, the tripartite context in Singapore was different. The trade unions in Singapore had gone through a major reorientation from the late-1960s as discussed in the previous chapter. The result was the creation of the basic framework for consensual tripartism by the end of 1970s, in which tripartite actors agreed to place national economic and employment interests first.

The development of the corporatist and pro-Singaporean trade unions was further cemented by another restructuring of the union system initiated by NTUC leader Devan Nair in 1980. It involved re-grouping the existing union structure, which had been largely a mix of workers employed under different employers and in different industries (Chew, 1991). The two largest general unions (Singapore Industrial Labour Organisation, SILO, and Pioneer Industries Employees' Union, PIEU) were the first ones to be restructured along industry lines. Branches of SILO and PIEU were separated and re-grouped under a common or related industry or trade (*ibid.*). The large size of the unions (together about 100,000 members) was seen as a potential threat that could lead to large-scale industrial unrest (*ibid.*:42). The restructuring was related to grassroots militancy brought by the members of PIEU (American Marine workers) in 1974-75 which severely strained industrial relations (Heyzer, 1983:123-125). After the event, Lee Kuan Yew was adamant about political leadership. Speaking at a NTUC seminar, he stated that "if the union leadership challenges the political leadership, the political leadership must triumph, if necessary, by changing the ground rules to thwart the challenges, using legislative and administrative powers" (Far Eastern Economic Review, quoted in *ibid.*). By the end of 1987, the unions were restructured to feature many smaller-sized unions: 37 industrial unions with a total membership of 106,087 workers (Chew, 1991:52). The number of house unions was also increased (from 13% of the membership in 1979 to 28% in 1987). As shown in Table. 8.1, union density overall increased slightly in the period 1983-1987 from 25.5% of the workforce to 26.1%. Union density ranged widely across sectors, however, from just over 97% in utilities (electricity, gas and water) to just 5% in construction mining and quarrying.

It is important to note that the re-organisation of the unions did not diminish their role. While the NTUC-centred union structure did not represent workers from across the spectrum, its collaborative stance in fact reinvented their role as active supporters of the government (Goh and Green, 1997). As a result, unions have been represented in key government agencies or institutes (e.g. the PSB, SDF), which are central to national development. The role of the unions in the skill development of the workforce has been particularly active, as discussed below.

Table 8.1: Union membership density (%), 1983-87, Singapore

	1983	1984	1985	1986	1987
Commerce	21.7	19.7	21.6	22.4	21.6
Community, social and personal services	27.2	26.4	26.1	27.0	28.2
Construction, mining and quarrying	5.4	4.9	5.2	5.2	5.0
Electricity, gas and water	82.3	76.5	90.5	96.3	97.2
Financing, insurance, real estate and business services	14.5	14.3	15.4	15.4	14.6
Manufacturing	21.2	19.6	23.4	23.5	23.5
Transport, storage and communications	55.8	55.0	61.9	66.0	60.0
Total	25.5	23.8	25.8	26.7	26.1

Source: extracted from Chew (1991), p. 55.

It was in this tripartite context that the trade unions supported the NWC's call for a wage freeze and the government's decisions to reduce CPF and other non-wage costs for employers during the recession. NTUC leaders persuaded members to accept wage cuts as they were deemed necessary to preserve jobs and aid the recovery (Chew., 1991:37). The union accepted that the competitiveness of the economy was vital for maintaining employment. The NTUC was also supportive of the flexible wage system. While some union officials were concerned about methods and the transparency of assessing worker and company performance, the union took a position in line with the NWC that the flexible system enabled companies to be more competitive and this helped to increase jobs (ibid.:70). Although NWC guidelines on wages were not legally binding, 86% of companies kept wages fixed, reduced annual increments or cut wages (MOL, 1992). The government also decided to adopt the flexible wage system for public employees from July 1988 (Chew and Chew, 1998:105).

The wage freeze and other anti-recession measures had an almost immediate impact on the economy. Growth recovered from -1.6% in 1985 to 9.4% in 1987 (Ministry of Trade and Industry, 1994). The unemployment rate, which increased from 2.7% in 1984 to 6.5% in 1986, declined to 3.3% by 1988 (*ibid.*).³ The flexible wage system was widely accepted by employers and rapidly diffused. The proportion of companies adopting some form of the flexible wages increased dramatically from 11% in 1987 to 71% in 1992 (NWC, 1993, in Chew and Tan, 1998:269). Unionised companies were highly represented in the figure (82% in 1991) (MOL, 1992). The unions' support for the new system, however, was hardly surprising given the consensual tripartite context.

It needs to be noted that the role of the NWC declined somewhat, or at least changed, following the wage restraint period. While agreement was reached on recommending another year of wage restraint in 1987, there were many disagreements between the tripartite actors in the NWC. Chew and Chew (1998) have documented this development. The government thought that it would be best to adopt the flexible system and reward workers with bonuses, rather than wage increases. While the employer associations wanted moderate pay increases, the unions wanted substantial rises in wages or bonuses to compensate for sacrifices made during the recession (*ibid.*:105). From 1988, NWC no longer issued quantitative guidelines, as this was preferred by the employers' associations. Unlike previously, differing interpretations and disagreements were publicly reported. While the NTUC announced its own guideline of a 5-8% wage increase in 1988, the employers' associations announced that the market and each company should decide the level of the increase. The Ministry of Labour urged companies to adjust wages and bonuses according to the labour market (*ibid.*:106). Chew and Chew (1998) have noted the disappearance of the policy effect of the NWC and a shift from a corporatist to a pluralist policy system. The larger implications of the decline of consensual tripartism in wage policy remain to be seen; however, 1987 provided a glimpse of the new era of industrial relations in Singapore.

The aftermath of the recession also marked the increased influence of local capital in policy-making processes. The previous chapter discussed how the influence

³ The unemployment rate was 3.9%, as of March 2005 (MOM, 2005a).

of business had been limited, as its participation was largely confined to government-initiated tripartite forums. The recession, however, challenged to some extent the supremacy of the government in guiding the economy, or at least created the opportunity for the policy-making process to be more inclusive and allow local business to more fully express its views.

The sub-committee on Local Business, created under the Economic Committee (1985), began by hearing complaints from local business representatives which were followed by “too rather angry reports highly critical of the existing development strategy”, which Chalmers writes “best illustrates the new involvement of non-state elements” (Chalmers 1992:68). Reports to the sub-committee on Local Business were submitted by representatives of a wide range of Singapore businesses and associations. The sub-committee’s report recommended mainly three things: i) the targeting of preferred industry; ii) the institutionalisation of consultative mechanisms between business and economic policy makers; and, iii) the development of a department which would specifically assist Singaporean businesses (*ibid.*). Furthermore, the prime minister in his 1985 National Day rally speech expressed his sympathy for self-employed businesspersons who had been harder hit than MNCs by the recession (Chng *et al.*, 1988:72). In addition, the Association of Small and Medium Enterprises was established in 1985 to represent their interests.

As part of the response, a ‘small enterprise bureau’ was established within the Economic Development Board in early 1986, existing EDB schemes to assist SMEs were expanded and a ‘local industry upgrading programme’ was launched to promote SME supplier linkages with foreign firms (Chalmers 1992:70).

Despite these developments, the prospects for the growth of local capital influence were unclear. The recession, in part, highlighted the vulnerability of the high reliance on foreign firms and, for the country’s continued economic success, the importance of local firms seemed to have increased. The government, however, continued to take a leadership in economic strategy without loosening the tight control over both the social and the economic spheres. This issue will be further discussed later in the chapter.

8.2 Enhancing the 'external' characteristics of the labour market: implications for the skill development system

8.2.1 Underpinning the fluid labour market: disincentives for company-centred skill development

Labour mobility in Singapore had been relatively high at least since the early 1970s. The shift to a flexible wage system further underpinned this characteristic. The most frequently cited reason for high labour mobility has been labour shortages (Lim, 1998c:59-60; Chew and Chew, 1992). The structure of the CPF, which is directly tied to individual workers and not administered through employers, has also contributed to labour turnover (Bauer, 1996:602). The previous chapter indicated that the absence of employment security (and related protection regulations) also encouraged many workers to move employment frequently in search of better wages. The flexible wage system further reduced the importance of age, and thus long-service, in determining wages.

A study on earning inequality in Singapore shows a significant decline in inter-age inequality between 1983 and 1989 and again between 1991 and 1996 (Rao *et al.*, 2003:222). While the decline between 1983 and 1986 was linked to high wages given to well-qualified workers who were mostly found in the younger cohort (during the accelerated growth period in 1979-1981), the decline between 1991-1996 is likely the effect of the flexible wage system (*ibid.*:221). As for income inequality and occupation, a decline in intra-occupation inequality began in the early 1980s and accelerated from 1989 until it stabilised after 1993.⁴ This also indicates a decline in the age premium in income inequality within the same occupation. By taking account of the wage freeze of 1986-87, the decreased importance of age in determining income appeared to be strongly linked to the flexible wage system. Statistics on monthly gross wages by occupation (1992) also show virtually flat income-curves for the same occupation (except managers and professionals) with little influence of age differences

⁴ Inequality is calculated by using the Theil index. Intra-occupation inequality declined from 0.268 in 1981 to 0.249 in 1987 and then declined sharply from 0.245 in 1989 to 0.201 in 1992. The figure fluctuates at the level of 0.230-0.234 after 1993.

(Ministry of Labour, 1992, in Bauer, 1996). These statistics show that the wage structure shifted from a seniority-based structure to feature a 'one wage for one occupation' structure. For workers, the change meant a further loss of incentives to stay with one company for a long period of time.

The government and the NWC were well-aware of the problem of job-hopping⁵ and its negative effect on productivity (Chew and Chew, 1992, in Bauer, 1996:602). In the early 1980s, the government was keen to encourage the development of Japanese, family-like industrial relations characterised by corporate welfarism, long-service and loyalty to the company. As discussed later, low labour mobility and loyalty were considered important elements in raising productivity then. Training was also an important element in raising productivity. German and Japanese companies in Singapore at the time, in particular, complained that they could not train due to high labour turnover (Lim, 1998c:60). As a result, the government promoted the development of the internal labour market.

However, the recession led the government and the NWC to adopt the flexible wage system, which was a decisive move away from the development of the internal labour market. During the high growth period of the 1970s the 'company as family' ideology was readily accepted, but the recession cast doubt on the ideology, as family-like employee-employer relations and the internal labour market could not shelter the Singaporean economy from recession (Chew and Tan, 1998:268). In Japan, the internal labour market provided an important basis for facilitating broader horizontal learning through job-rotation and skill-upgrading by taking a long-term perspective in career development within the company. Its relative absence in Singapore prompted the need to find another incentive mechanism to facilitate learning in the workplace.

It needs to be noted that job-hopping was somewhat mitigated by the NWC's recommendation not to pay year-end bonuses to employees who resigned during the course of the year (Lim, 1998c:60). Lim has commented that "in Singapore today it has now evolved that workers change their jobs, if they want to, after they receive their

⁵ 'Job-hopper' was defined as one who changes jobs several times in a year. The CPF was once used to monitor job-hoppers and the information on them was given to employers, if requested. However, most employers did not use the service (Lim, 1998c:59).

year-end bonuses” (ibid.). In fact, job mobility⁶ has been in decline since the early 1990s: from 4% in 1990 to 2.7% in 1997 and 2.2% in 2004 (MOM, 1998a, 2005b).

8.2.2 Link between education and work: increased importance of pre-employment qualifications

Contrary to the reduced age-income link for most occupations, the correlation between education attainment and occupations/income exhibited a dramatic increase. The two highest income groups, ‘Legislators, senior officials, managers’ and ‘professionals’ are largely dominated by workers with tertiary education (MOL, 1995; MOM, 2004a). As shown in Table. 8.2, there is a strong relationship between higher education and high income occupations. Inequality between different occupations also doubled between 1974 and 1998 (Rao *et al.*, 2003: 224). The economic restructuring of 1979-81 was a major contributor to the rapid increase in wages for professional, administrative and managerial workers.⁷ This resulted in higher inequality among workers with different education attainment (Mukhopadhaya, 2003:221). In 1989, ‘legislators, senior officials and managers’ earned nearly three times and ‘professional, technicians and related workers’ earned 1.9 times the overall mean income of all occupation groups. However, ‘production workers, equipment operators and labourers’ earned 0.6 times. Although income inequality between occupations had been declining as more educated people entered the labour market, the disparity was still considerable. ‘Professional workers’ earned 2.3 times of the overall mean income, while ‘production workers’ earned half of the mean income in 1998 (ibid.:258).

Another study shows that the mean income of those with tertiary education was 3.3 times the overall mean income in 1989 (ibid.:253). The education premium has

⁶ The figures are based on the average of the monthly resignation rates across the sector, during the four quarters of the year. The monthly rate during a quarter is defined as the average number of persons who resigned in a month during the quarter divided by the average number of employees in the establishment (MOM, 1998a).

⁷ The rapid increase was also due to skilled immigrants within the professional group who were attracted to the high salaries. This, itself, created the income disparity between locals and expatriates (Mukhopadhaya, 2003:261). While the second half of 1990s witnessed an increase of more than 60% for women in the labour force, including legislators, senior official and managers, male-female income inequality had increased by 12% and on average men in this group enjoyed a salary almost 28% higher than that for women (ibid.)

Table 8.2: Educational attainment for different occupational category (% of total for that category), 2004, Singapore

Educational Attainment	Total	Managers and senior officials	Working proprietors	Professionals	Technicians and Associate professionals	Clerical workers	Service and Sales workers	Production craftsmen and related workers	Plant and machine operators and assemblers	Cleaners, labourers and related workers	Others
Men & women	100	100	100	100	100	100	100	100	100	100	100
No formal qual. or lower primar.	13.6	0.9	11.9	0.0	0.3	3.2	19.3	24.0	26.9	45.3	1.1
Primary	4.3	0.5	5.8	0.0	0.2	2.1	7.4	10.5	11.2	8.2	0.6
Lower secondary	13.8	4.2	21.0	0.4	4.6	14.1	23.7	26.7	30.7	18.5	4.9
Secondary	25.5	14.5	29.8	3.0	23.1	50.2	34.0	27.5	25.2	23.7	23.0
Upper secondary	11.5	11.9	11.2	8.3	18.6	17.0	8.5	7.6	4.0	3.2	32.3
Diploma	10.8	12.8	7.2	12.3	25.1	10.3	5.1	2.9	1.7	0.3	31.1
Degree	20.6	55.2	13.1	76.0	28.1	3.3	1.9	0.7	0.3	0.8	7.0
Women	100	100	100	100	100	100	100	100	100	100	100
No formal qual. or lower primar.	15.3	1.4	10.2	0.0	0.2	2.3	21.1	28.9	30.8	45.2	4.3
Primary	3.5	0.7	4.5	0.0	0.1	1.8	7.3	12.2	12.1	6.3	0.0
Lower secondary	11.9	2.5	14.0	0.3	2.7	12.0	24.6	23.3	28.5	16.5	0.0
Secondary	28.7	14.8	35.0	3.3	19.4	51.8	31.3	25.6	23.9	27.4	30.4
Upper secondary	11.8	13.8	12.1	12.0	18.6	17.6	8.7	5.6	3.8	3.4	17.4
Diploma	9.7	11.2	7.0	9.9	24.8	11.1	5.0	4.4	0.6	0.2	26.1
Degree	19.0	55.9	16.6	74.3	34.2	3.5	2.2	0.0	0.4	1.1	17.4

Source: Percentage calculations by the author based on data from Singapore Ministry of Manpower, Manpower Research and Statistics Department, Table 38, website: www.mom.gov.sg. Note: not all columns equal 100 due to rounding.

been declining (from 3.3 times to 2.8 times in 1992 and 2.4 times in 1998) as new younger workers have become better qualified. However, the less educated were worse off as their income has increasingly been reduced. The mean income of those who never attended school or who were educated at lower primary school declined from 0.56 of the overall mean in 1989 to 0.52 times in 1992 and 0.42 in 1998. The figure for those with secondary education declined from 0.93 and 0.92 to 0.84 in the respective years. The data suggests that by 1998 a worker needed a post-secondary education to earn close to the overall mean income (ibid.) (see Table 8.3).

While the importance of age in determining wages was reduced for most occupations (technicians, clerical, production, craftsmen and cleaners and labourers), it was not the case for managers and professionals. For these groups, the income level of those aged 50-54 was more than double that of those aged 20-24 (Bauer, 1996:605). This indicated the importance of entering these occupations for gaining higher income. In 2003, among the two highest income occupation groups ('managers, working proprietors and senior officials' and 'professionals'), nearly 70% of the workforce possessed a diploma and above (degree holders accounted for 56%) (MOM, 2004a).

Table 8.3: Income of education attainment groups, relative to overall mean income, Singapore, selected years

	1974	1989	1992	1998
Never attended school or lower primary	0.734	.555	0.516	0.420
Primary/lower secondary	0.831	0.661	0.649	0.577
Secondary	1.198	0.927	0.920	0.839
Post-secondary	1.597	1.479	1.132	1.110
Diploma	--	--	1.491	1.222
Degree	4.292	3.258	2.778	2.383

Source: Portion of Table 5 in Mukhapadhaya (2003), p. 253.

The above statistics suggest that the correlation between education attainment and occupation/income provided strong incentives for individuals to increase their educational attainment in gaining access to well-paid jobs. As discussed later, this has translated into a rapid increase in well-qualified workers in Singapore.

It is worth noting that education qualifications had a direct link to specific job posts, or occupations in Singapore. While higher education credentials are equally important in getting prestigious employment in Japan, qualifications are commonly linked to gaining employment with prestigious companies, not specific jobs. For long-serving employees, it is relatively common in Japanese companies to expect that their profession will change several times as their job assignments change.

The combination of the fluid labour market and the education-occupation link indicates a general career path in Singapore that is largely horizontal along the same or related occupational/professional line. To be sure, internal promotion and career development within a company does take place to some extent. While it is not clear how prevalent the practice was, a study of SMEs in Singapore suggests that the so-called 'internal promotion ladder' existed particularly among Chinese-owned companies for Chinese employees (Kopnina, 2004:254). A survey of HRD practice in Singapore (1987-1990) indicates that two-thirds of surveyed companies practiced internal promotion to fill job vacancies. However, the same study showed that 'advertising in newspapers' was by far the most used recruitment method for managers and supervisors, while executive search firms and professional services were also commonly used in recruiting employees for higher positions (NPB-SIPM, 1991). It can be said that skill development also takes place to support this horizontal career path, thus skill development is more specialised along professional lines (unless one wishes to make a career change). This contrasts with the greater emphasis placed on broader and wider skills and knowledge development emphasised in Japanese companies, although the shortages of specialised talent are a major concern in contemporary Japan (Chapter 6).

8.3 Enhancing the alignment of skills with employment and economy

The government has been strongly interventionist in shaping the education system. Having been convinced of the important role of education in achieving employment and economic growth from the outset, the government was adamant in ensuring a sufficient and relevant supply of educated workers to meet the immediate and future needs of the Singaporean economy. The effort led to the increased responsiveness of the education and training system in tune with economic strategies and progress. Formal education and training has been placed at the core of the overall national skill development system as a result.

8.3.1 Expansion of technical vocational education and training

While pursuing the quantitative expansion of technical education and training (hereafter: technical education) since the 1960s, the government also broadened and upgraded technical education provision from the early 1980s onward. Between 1983 and 1991, the Vocational Industrial Training Board (VITB) introduced a series of training programmes targeting older workers with little education and training. This training included: Basic Education for Skills Training (BEST) in 1982; Modular Skills Training (MOST) in 1986; Worker Improvement through Secondary Education (WISE) in 1987; and Training Initiative for Mature Employees (TIME) in 1991 (Chiang, 1998:48). These training programmes were financed by the levy-based Skills Development Fund established in 1979. The VITB grew to be the largest supplier of general vocational skills for occupations like fitters, electricians and welders through its vocational and technical institutes (Kuruville, Erickson and Hwang 2002:1463). Between 1979 and 1991, the VITB trained approximately 112,000 school-leavers and workers (9% of the total workforce), becoming a major player in the provision of training and in skills upgrading for the workforce (Chiang, 1998:48).

The VITB was upgraded to a post-secondary institution, the Institute of Technical Education (ITE) in 1992 to keep pace with the needs of the labour market. This was linked to the revelation in the late 1980s that companies preferred to employ

VITB graduates with a secondary education because of their greater trainability, while the majority of graduates with only a primary education had great difficulty in securing employment in their trained fields (ibid.:52). In the school system, it led to reforms for improving primary school education, including the need to complete at least 10 years of general education before students could pursue vocational technical training or higher academic studies (Ho and Gopinathan, 1999:106). This created the need to turn the VITB into a post-secondary institution. The ITE offers not only more than 40 courses tailored to meet the needs of industries, but also a comprehensive apprenticeship scheme to complement institution-based studies in areas such as aerospace, petrochemicals and micro-electronics (Gopinathan, 1999:302). The proximity to industries was ensured by the establishment or upgrading of 10 technical institutes; all of which were strategically located close to industrial areas for easy access to, and from, companies (Chiang, 1998:52).

8.3.2 Rapid improvement in the level of formal education attainment among the workforce

While the expansion of technical education supported technology-intensive industries, Singapore also made rapid progress in terms of raising the general level of education among the workforce. The proportion of the workforce with no or less than primary level education was 40% in 1974. The figure declined to 23% in 1983 and then steadily to 13% in 2003 (MOM, 2004a). At the same time, workers with a post-secondary education⁸ increased from 9% in 1974, to 20% in 1989, 34% in 1998 and 41% in 2003 (ibid.). The proportion of the workforce with a degree qualification increased rapidly from the early 1990s, from 15% in 1994, to 24% in 1998 and 29% in 2003⁹. The increased level of education for the younger cohort contributed much to this increase. Currently among the workforce aged 20-29, 56% of them have a post-secondary qualification (ibid.). In 2003, while only 7% of those aged 30-39 and 14% of those aged 40-49 never attended or had only lower primary education, the figure for those

⁸ This includes upper secondary, diploma and degree qualifications.

⁹ Among the female workforce, the proportion increased from 14% in 1994 to 27% in 2003, while the figure for the male workforce increased from 17% to 31% over the same period (MOM, 2004a).

aged 50-59 was 23%. The fact that the equivalent figure for those aged 50-59 used to be much higher (45% in 1992) indicates that the improved education level of the younger generation has pushed up the overall level of education among the workforce (MOL, 1995; MOM 2004a). However, while many companies began to prefer employing workers with at least a secondary education (since late 1980s), the proportion of the workforce with below a secondary education accounted for nearly 40% of the prime-aged workforce (aged 40-49) and 53% for those aged 50-59 in 2003 (MOM, 2004a).

8.3.3 Macro-level management of skill demand and supply

One of the distinctive approaches used to coordinate skill demand and supply has been manpower planning at the national level. This task has been undertaken by the Council for Professional and Technical Education (CPTE), which was established in 1979. While the education system ensured the delivery of quality education and training, the CPTE guided the supply of education so as to avoid over-supply (or under-supply) specific qualifications to meet the needs of the labour market. The Council not only projected the number of graduates with specific skills required in the current (or future) economy but also set quotas for the intake for universities, polytechnics and schools. The Ministry of Education was the main partner in the Council; however it was placed to under the chairmanship of the Ministry of Trade and Industry (Chiang, 1998). The chairmanship of the Ministry of Trade and Industry indicated Singapore's consistent approach to consider skill development as an integral part of economic development.

The first projection by the CPTE in 1980 indicated the need to double the number of engineers produced annually. The projection led to the establishment of the Nanyang Technological Institute in 1981 (Nanyang Technological University since 1991) (Chiang, 1998:184). In a more recent projection, the CPTE noted an annual shortfall of some 7,000 graduates by 2000 (Low, 1998:4). However, low quotas were set for medicine (particularly female) and law to, among other reasons, "deflect bright

students away from these lucrative professions and into engineering” (Low, 1998:4).¹⁰ There were restrictions on the intake for business administration for similar reasons. Engineering has been vigorously promoted, as wafer fabrication was considered the next stage of development for electronics and other science subjects.

The effort to coordinate skill demand and supply was further enhanced in 1999 by the establishment of the National Manpower Council. The ministerial-level council, chaired by the Minister for Manpower, took over the role previously undertaken by the CPTE to ensure a more coordinated and responsive approach to balancing Singapore’s overall manpower demand and supply.¹¹

8.3.4 EDB-backed technical training institutes

The shortcomings of the formal education system in supplying skilled workers have been addressed in part through public training institutes supported by other government agencies. Among these, training institutes backed by the Economic Development Board were particularly instrumental in responding to the needs of multinational corporations.

The EDB played an important role in strategically attracting and deploying foreign direct investment to steer the direction of the economy.¹² After supporting a number of MNCs-based training institutes until 1970s, the EDB facilitated the establishment of institutes of technology with technical and financial assistance of foreign governments (Chiang, 1998:106-107). While there was some degree of cost-sharing, the expertise and training materials were provided by the investing companies and their governments (Kuruvilla, Erickson and Hwang, 2002:1464). These included: the Japan-Singapore Training Centre (1979); the German-Singapore Institute (1982); and the French-Singapore Institute (1993). The initiative aimed to create windows to new technology, the transfer of such technology and access to foreign expertise and teaching systems (Chiang, 1998:106-107). These courses were “designed to meet real

¹⁰ It should be noted, however, that more recent reforms in university education are likely to change this picture. In 2001, the government announced its intention to increase the university intake by 5,000 (on top of the current annual intake of 10,000) (Lee and Gopinathan, 2001:84).

¹¹ A speech by then Deputy Prime Minister Lee Hsien Loong at the launch of the Manpower 21 Plan in 1999 (MOM, 1999).

¹² See also: Low *et al.* (1993); Huff, 1995; Rodan, 1989; Ashton and Green, 1996; and, Castells, 1998.

or anticipated needs of industry” (ibid.). When the EDB identified the software industry as a new fast-growth industry for Singapore, it looked for support and helped establish the Japan-Singapore Institute of Software Technology to train the large numbers of workers needed in software and services (ibid.). When these institutes were eventually absorbed into the formal education system to become part of the polytechnics by the early 1990s,¹³ their staff, facilities and well-designed programmes contributed much to the quality of engineering teaching at the polytechnics (ibid.:156-157).

A study on the technological upgrading of MNCs also demonstrates the practice of local partnership between companies and local universities which facilitated a move to more sophisticated production (Hobday, 1994). The three electronics MNCs studied had arrangements with university engineering departments as well as the government’s Institute for Microelectronics. One of the companies conducted product development work with local universities and polytechnics and donated equipment for use by the IME (ibid.:548). The study also noted the role of the EDB in responding to the needs of MNCs by improving local engineering departments and enhancing R&D capacity by setting up the IME (ibid.:551). While the extent local partnerships was not clear, the examples indicated the improved capacity of public education and training institutions to respond to the skill needs of industry over the years. The Asian financial crisis of the late 1990s further sparked the EDB to launch a new training programme to build the technological and innovative capabilities of industry. One of its recent initiatives included a new training and attachment programme (TAP) which would help to fund the cost of training new engineering graduates (recruited by MNCs) at their overseas plants (Gopinathan, 1999:303).

8.3.5 More reform, innovation and refinement in the education and training

The education system has been undergoing constant review and upgrading with new initiatives to keep pace with changing skills demands. The relentless effort to improve

¹³ The Japan-Singapore Institute, the German-Singapore Institute and the French-Singapore Institute were all transferred to Nanyang Polytechnic in 1993. They provided the polytechnic with a solid basis for its School of Engineering. The Japan-Singapore Institute of Software Technology was transferred to Singapore Polytechnic in 1987 (Chiang, 1998:107, 156).

the quality and relevance of education and training is impressive. When the shortcoming of creative, critical and thinking ability among the workforce was highlighted, the government launched the Thinking Skills Programme in the school curriculum in 1997 (MOE, 1998). It has led to a reduction in the teaching of factual knowledge and an increase in research-related assignments and project work. The curriculum content in some subjects was reduced by 30% and more 'thinking type' questions were used on major examinations (Gopinathan, 1999:300).

The school system was further refined by granting schools more autonomy, increasing teacher training and changing the funding mechanism to improve the quality of provision (Ho and Gopinathan, 1999). Special education funds such as Edusave were also set up to facilitate equal opportunities in education (ibid.:106).

The vision of a workforce that can think creatively, take risks, start businesses and create jobs (expressed by Lim Swee Say, form Deputy Secretary of the NTUC) led to a major initiative in higher education to foster entrepreneurship (ibid.:301). While the National University of Singapore set up a centre for management to teach undergraduates how to run a business, foreign institutions like MIT, Wharton John Hopkins, INSEAD and the Chicago Business School were encouraged (and did) to set up campuses or programmes in Singapore to support entrepreneurship development (ibid.).

Recent reforms in university education are closely linked to broader public sector reform, Public Service 21, which began in 1995. The reform aims not only to 'induce an environment for stimulating greater efficiency and cost-effectiveness' but also to 'cultivate the entrepreneurial spirit among the government and public service institutes' (Lee and Gopinathan, 2001:80-81). Universities are no exception. While the responsibility of management and budgetary allocation has been decentralised, the universities are required to strengthen quality assurance. Entrepreneurialism is encouraged and reflected in the establishment of spin-off companies, in which academics are encouraged undertake research and development and provide consultancy services to business (ibid.:93). In addition, university is an important strategic sector for developing Singapore's niche in the global economy. In 2002, the Ministry of Technology and Industry issued a policy paper, Developing Singapore's

Education Industry, which explored the potential of developing education to compete in global education industry (Lee and Gopinathan, 2003:175). The government is currently planning to develop a three-tiered university system which consists of: 1) elite universities, by inviting 10 world-class universities and institutes; 2) local universities (NUS, NTU and SMU); and 3) additional private universities.

8.3.6 Consolidating mindsets through citizenship education

Beside its significant contribution to economic development, the education system has been playing another important role: educating the hearts and minds of young Singaporeans. The initiative has gained momentum since the early 1990s with the renewal of the moral education programme (1992) and the launch of the National Education (1996). The initiative was partly related to the government's realisation of 'serious omissions' in the 1980s in education provision to provide a more rounded education (Gopinathan, 1999).

The motives for the recent initiatives in social education are cultural, political and economic, as J. Chew (1998) stated in her study on civics and moral education in Singapore. She writes that the recent move towards National Education "can be interpreted as a strategy to legitimise, via the education system, the political leadership's renewed emphasis that Singaporeans must meet new economic challenges head-on in a highly competitive and integrated global environment" (ibid.:506). By analysing teaching materials, she found that one of the aims of such citizenship education is to teach young people an appreciation of and tolerance towards cultural and ethnic diversity, which is central to the political stability of the country. However, she also noted that citizenship education emphasises the importance of sustained economic growth in achieving a good life, including the value of keeping production costs low and the continuation of capable, honest and committed leadership to take Singapore's success into the 1990s' and beyond (J. Chew, 1998:512).

Examining recent developments in education, Ho and Gopinathan (1999:112) identified an underlying ideology that included: a belief in the relationship between education and the economy; equality of educational opportunity based on merit, ability

and effort; and, moral understanding of right and wrong and of one's place in society. Teaching these values through schooling has contributed to a social base that supports the discourse of the education system and the political leadership which oversees it.

8.3.7 Shared responsibility and commitment, enhanced by constant feed loops and job rotation

What the above analysis indicates is the government's system-wide approach – including schools, technical education, universities and specialised training institutes – in improving the skill development system. The uniqueness of the system is that: a) key ministries and agencies directly responsible for economic development play an instrumental role in developing the skill base of the workforce; b) they all speak with one voice, rather than displaying openly conflicted interests; and c) the supply of the educated workforce is managed at the macro level through manpower planning. The trade unions were one of the main such actors supporting the construction of the skill development system.

Kuruvilla, Erickson and Hwang (2002) note the existence of various 'feed loops' in maintaining the relevance of vocational and other skill development programmes. Each training institution has established a link with the private sector to obtain feedback and learn the types of training required. The key councils related to skills development, such as the Trade Advisory Board, the Skill Development Funds and the Productivity and Standards Board are tripartite bodies. Another feature of the 'feed loops' is the job rotation of senior officials among key government, employer and labour organisations, especially between the leadership of the NTUC and the PAP party (Goh and Green, 1997:232). This has contributed much to the realisation of the concerted action on skill development.

What needs to be remembered however is that Singapore has come a long way to 'speak one voice'. The government had endeavoured to change the mind-set of people to place the interest of the nation first. The cohesion and almost single-mindedness that the stakeholders exhibited was difficult to achieve, to say the least, without understanding the specific historical conditioning of different social interests in

Singapore. The citizenship education discussed above is also a contributing factor in reinforcing the cohesiveness of society.

8.4 Facilitating skill development in the workplace: toward the creation of a training culture?

While raising the skill level of the workforce had always been at the centre of nation-building, the demand for increased productivity since the early 1980s moved the level up one step. This involved facilitating training in the workplace. The accelerated economic restructuring of 1979-81 rapidly raised the level of productivity especially in the manufacturing sector. However, it was argued that such an increase in productivity was largely in-put driven (capital investment) and could not be sustained (Krugman, 1994 and Young 1995, in Leung, 1998)¹⁴. Three problems were particularly highlighted as bottlenecks for continued growth of productivity: the low level of skills; high labour turnover; and weak labour-management relations (e.g. Milton-Smith, 1986; Wilkinson, 1986; Chew and Tan, 1998; SPRING 2004). It was suggested that the speed of technology upgrading was so rapid that the learning capacity of the workforce could not keep pace (Leung, 1998). This implied that the level of skills of the workforce was not yet adequate to absorb and translate the technology into higher productivity. High labour turnover was another major bottleneck for raising productivity and facilitating training in companies.

Despite the importance of workers' skills for increasing productivity, investment and participation in training at the level of enterprises was a shortcoming. While the levy-based SDF was set up for enterprise training, the use of the fund was very limited at the beginning. During its first six months of operation, it granted only \$1.2 million out of an accumulated fund of \$45 million, partly because employers were uncertain about the qualification requirements (Pang and Tan, 1983:237). While approximately 950 workers participated in the first round of courses in the BEST programme in 1982, about 50% eventually dropped out (Asia Week, 10 Dec. 1982). As noted, MNCs' reluctance to train due to high labour turnover needed to be

¹⁴ For studies on productivity, also see, Koh, Rahman and Tan (2002) and Lim and Lee (2002).

compensated partly by the EDB's effort to set up special training institutions. While high education qualifications provided better prospects for gaining a high-wage job, many ordinary workers, especially older and less qualified ones, did not necessarily perceive such benefits and were not forthcoming in participating in training (Goh and Green, 1997:237). Workers also needed to weigh the fees and opportunity cost of time attending training courses against potential benefits, in particular as such benefits are uncertain (*ibid.*).

To a large extent, Singapore did not have labour market characteristics which could entice training at the enterprise level. As discussed, the labour market was characteristically external. This was partly a result of the particular accelerated economic growth strategy based on MNCs and the particular kind of social pact on employment that emerged. While MNCs created a large number of jobs, considerable discretion was given to them on labour management including hiring and firing (as one of the incentives to invest). The government endeavoured, and largely succeeded, in providing and maintaining employment (and social security) at the national level; however it did not necessarily secure individual workers' jobs at particular companies. For employees, while being persuaded to put the interest of the nation first, the employment practice facilitated a sense of job insecurity, and the labour shortages facilitated their opportunism resulting in many of them changing jobs frequently. In the case of Japan, the social pact on employment made it difficult for many employers to layoff workers and left them no choice but to train existing workers to meet new skill needs. In Singapore it was a different kind of social pact: it operated at the national level. Under the fluid labour market, the restructuring of the economy to focus on high value-added production exacerbated the acute shortage of skilled workers and further increased the risk of losing trained workers.

The government, together with its agencies and the NTUC, intervened to overcome the shortcoming. In the wake of the acute need to increase productivity, it launched a major productivity campaign in the early 1980s. The National Productivity Board¹⁵ launched its productivity action plan in 1983 to set out the importance of

¹⁵ This was later transformed into the Singapore Productivity and Standards Board (PSB) in 1996 and the Standards Productivity and Innovation Board Singapore (SPRING) in 2001.

higher productivity as vital for Singapore's survival and well-being and to inculcate 'productivity will' among the workforce (Milton-Smith, 1986; Wilkinson, 1986). It urged the reorientation of work attitudes and aimed to instil workers with 'the desire to develop oneself for the growth of the company and the nation'. A survey in 1983 revealed, however, that 'nearly seven in 10 workers were reluctant to put productivity concepts to work' (Milton-Smith, 1986:399).¹⁶ In this context, the government turned to promoting Japanese-type management practices as a means of improving employee work attitudes, labour turnover, and increased productivity through harmonious labour-management relations. Family-like corporate management was seen to contribute to workers' loyalty and attachment to the company, and thus to reduce labour turnover and generate higher productivity (Chew and Tan, 1998:267-8). However, these efforts met with only partial success. While practices such as quality circles, house unions and consensus decision-making were adopted to a considerable extent, lifetime employment and the seniority system largely were not (Gill and Wong, 1998).¹⁷ Incompatibility with the meritocratic culture of work and individualism in Singapore was the main reason (Asia Week, 5 Nov, 1982; Chew and Tan, 1998). Eventually, the move towards a flexible wage system in the mid-1980s marked a decisive move away from the pursuit of Japanese labour-management practices.

8.4.1 Promotion of Japanese OJT

While the EDB training institutes provided a short-term solution (albeit based on a long-term vision to develop the national training system) to satisfy the training needs of MNCs, the government made persistent efforts to promote training at the enterprise level. In the mid-1980s, while it might have been partly influenced by the interest in Japan at the time, the Japanese system of on-the-job training (OJT) was promoted for adult workers. However, its adoption went through several adjustments, resulting in a model which was considerably different from the original one, as well documented in

¹⁶ It was also revealed that while 90% of the respondents felt that participation in small group activities at work could contribute to higher productivity, only 17% of them expressed their willingness to participate in such activities. 70% of them also thought that the company, rather than themselves, benefits most from efficient production (Asia Week, 5 Nov. 1982).

¹⁷ For a more extensive discussion and evidence, see, Rodgers and Wong (1996) and Rodgers (1997).

the study on the transferability of training by Ashton and Turbin (1995). The initial feasibility study by the Japanese consultants in 1986 highlighted the difficulty of transferring the informal (unstructured) model of OJT as it was used in Japan¹⁸ due to the low level of education of workers in Singapore. This meant making the components of the learning process more explicit by documenting them and thereby structuring the learning process (Ashton and Turbin, 1995:13).

Another problem was the reluctance of supervisors to pass on their knowledge to subordinates. They saw it as a way of putting themselves out of a job (Ashton and Turbin, 1995:13). Despite the setback, the government did not give up and, instead, focused on training supervisors and managers to shed their fears. The NPB sold structured OJT as a means of increasing productivity, not as a training programme, so that employers would take it more seriously (*ibid.*:14). While informal OJT in Japan is applied at almost all levels and for all types of jobs, structured OJT was promoted only for selected critical jobs. However, after the adjustment period, persistent efforts have brought sizable success (2,500 employers with a total of 40,000 workers undertaking some form of structured OJT, as of 1995). The NTUC has been supportive of OJT also, in particular with the prospect of developing a national and/or industry-wide certification system to validate skills acquired through OJT. It regards such a development as a way of increasing the transferability of OJT across employers which is valuable to its members (Goh and Green, 1997: 238).

Beside structured OJT, the NPB has been expanding a range of programmes to facilitate workplace learning. In the early 1990s, it introduced the New Apprenticeship Scheme modelled on the German apprenticeship system but modified (Ashton and Turbin, 1995:12). OJT 2000 was launched by the NPB in 1993 to train 70,000 apprentices by 2000 (Kuruvilla, Erickson and Hwang, 2002:1472). After the NPB was transformed into the Singapore Productivity and Standards Board (PSB) in 1996, the People Developer Standard was launched in 1997 to provide a systematic process of reviewing skill needs and aligning them with staff development plans. The effort has been strengthened by the establishment of the Singapore Workforce Development Agency in 2003.

¹⁸ Largely informal and unstructured, relying heavily on workers' ability to learn on their own.

8.4.2 Example from the construction industry

The government's determination to promote workplace training brought about other policy changes designed to create the conditions conducive to training. The experience of promoting training in the construction industry, studied by Debrah and Ofori (2001) illustrates well this initiative. Training for this sector did not fit the model of SDF-backed training for workers, as 85% of its workers were foreigners who were not eligible for the SDF (*ibid*).

The sector faced a multitude of disincentives for employers to train and was one of the toughest sectors in which to promote training. The industry relied on unskilled, short-term foreign workers, who were allowed to stay in Singapore for a maximum of four years before employers could benefit from investment in training. Workers were largely sub-contracted for labour only and very few of even the large construction companies had direct site workers (Debrah and Ofori, 2001:189). The Construction Industry Development Board (CIDB) has been the main body promoting training in the sector. However, the poor image of working in the sector made it extremely difficult for companies to recruit Singaporeans and to develop core skilled workers. The CITC, the training body in the industry, was experiencing difficulty meeting the target of producing 2,000 to 3,000 skilled workers annually (Wilkinson, 1986 in *ibid*:188).

While the CIDB improved the quality and quantity of training, the government also attempted to change the behaviour of companies regarding training by requiring them to use a minimum proportion of skilled workers on their construction projects from 1988 onwards¹⁹. The requirement for employing skilled workers was raised in 1995.²⁰ From April 1999, the proportion of foreign workers who were required to pass a basic skills test (reading basic drawings and understanding some English) was raised to 50%, from 20% in 1987 (Low, 2002:106). The government announced that contractors would be required to 45% of their workforce obtain Skills Evaluation Certificates by 2005. This will be the minimum skills standards that 60% of foreign

¹⁹ Workers Certification Scheme

²⁰ Only subcontractors accredited under the Singapore List of Trade Subcontractors and employing a minimum of 10% of skilled workers have been permitted to work on public sector projects (Straits Times, 1994:23).

workers must obtain by 2010 (ibid.). The incentive to train also included changes in immigration policy. A special bilateral deal was made for construction workers recruited from Bangladesh which required new recruits to sit and pass certain CIDB-certified tests for basic skills before they leave for Singapore (Low, 2002:106-107). While unskilled foreign workers could stay in Singapore for a maximum of four years, trained and certified foreign workers may now be allowed to stay for ten years and may also be eligible for consideration for permanent residency (Debrah and Ofori, 2001:189).

Debrah and Ofori (2001:1950) caution that despite these policy changes, “a lot of construction firms still did not bother to send their employees on training”. The problem of attracting local workers due to the poor image of the sector also remains unresolved. However, the experience of the sector shows the government’s persistent effort in promoting training and in bringing about significant progress. The CIDB estimated that only 6% of construction workers were skilled in 1993, but the figure improved to 12% in 1996 and 14% in 1997. The number of skilled workers trained by the CIDB increased from 2,000-3,000 in 1983 to 25,000 per year in 1997 (ibid.:196).

8.4.3 Role of trade unions

As noted, the reorientation of the unions as collaborative and active supporters of the government’s initiatives reinvented, as opposed to diminished, the role of trade unions. Contrary to Japan, where union influence was increasingly weakened, trade unions in Singapore –although centred on the NTUC– remain a major influence in society, albeit in limited ways. The unions have been fully behind the government’s effort to strengthen the skill base of the workforce. This is not only because the unions wish to respond to the skill needs of their members. It is also because of their active support for the government’s skill initiatives (Goh and Green, 1997).

The unions have played an active role, in particular, by encouraging individuals to participate in training, but also by encouraging firms to commit themselves to training. A study by Goh and Green (1997) describes such activities by unions. The activities have ranged from training provision and financial assistance to active

campaigning. The NTUC has offered a number of training courses, often jointly with the NPB and the ITE. These training programmes have included: Training Initiative for Mature Employees; BEST and the WISE courses to help workers without education to obtain primary and secondary level proficiency in mathematics and English; and computer courses, in particular for older workers. In 1996, the NTUC also set up the Skills Redevelopment Programme (SRP) to train 100,000 workers over 5 years²¹. The NTUC has subsidised training courses and offered a discount on training materials including computer and software packages. Unions offered scholarships and bursaries. The NTUC's Skill Secretariat visited actual workplaces and factories to promote skill training programmes (ibid.:237-238). The staff of the Secretariat have set up their stalls and attempted to talk to workers during their breaks. Between November 1991 and December 1993 they visited 70 workplaces and received 2,495 applications from 1,538 workers to attend scheduled courses (ibid.). The union's position is that it was not able to supply job protection under the uncertain economic environment; but "[t]he only security [the unions] offer is that which derives from being more skilled" (ibid.:239). The position is in line with the government's view.

Since the early 1990s, the NTUC has also adopted a strategy of putting pressure on employers to commit themselves to training by demanding the inclusion of 'commitment to training' as part of collective agreements. The initial call by the NTUC's then acting Secretary-General Goh Chee Wee (1993) was to include a clause on training budgets and training hours per worker in collective agreements, although this met with strong opposition from employers. However, the call to employers to commit to training was essentially supported by the Minister of Labour (at a NTUC pre-Conference seminar in 1994), although he suggested the union tone down the demand for "qualitative written commitments to be reviewed in the light of experience gained" (ibid.:236). This suggestion was accepted both by the trade unions and by the president of the Singapore National Employers' Federation. The impact of this agreement was remarkable. The number of collective agreements containing a statement on training increased from a mere 2.5% in January 1993 to 41% in April

²¹ A speech by then Deputy Prime Minister Lee Hsien Loong at the launch of the Manpower 21 Plan in 1999 (MOM, 1999).

1997. Goh and Green (1997) are cautious about the effectiveness of such agreements, as they varied from broad statements of commitment to clauses requesting employers to 'look into' or consult on training needs. They were rarely directly linked to pay increments.

Notwithstanding the fact that the unions' collaborative stance can limit their role in other domains, the intervention of unions in skill development matters has been more direct and influential, compared to contemporary Japan.

Summary

The above discussion indicates that Singapore has come a long way in promoting training in the workplace. A survey of over 400 companies on human resource management practices indicated that approximately 80% of companies provided some form of formal training for their employees in 1987-1990 (NPB-SIPM, 1991:25). A quarter of the employees attended some kind of training each year (28% of managers, 26% of supervisors and 26% of rank-and-file workers). According to the survey, OJT was emphasised for all categories of employees (however the survey did not refer to quality and whether OJT was structured). Other data showed that the use of the SDF was increasing. Graduates from SDF training places grew by 5.6% on average between 1988 and 1998, while the number of hours of training per employee increased from 34 hours in 1995 to 40 hours in 1998 (Kuruvilla, Erickson and Hwang, 2002: 1468-69). Despite the initial reluctance to train, employers were increasingly investing in training. The level of investment increased from 1.8% of the payroll in 1988 to 2.05% in 1992, and then to 3.4% in 1995 for large companies. The equivalent figure was 1.5% for small companies (NPB, in Ashton and Turbin, 1995:18). (More recent figures are somewhat lower: 1.6% in 2000 and 1.2% in 2003 (MOM, 2004b)). The Ministry of Manpower has recently reported that 68.6% of establishments surveyed provided structured training for at least some of their employees in 2003 (ibid.)

While these figures provide a general sense of progress, the verdict on the extent to which an enterprise training culture is emerging in Singapore requires more time. As indicated in the discussion of structured OJT, there was still reluctance by supervisors to 'pass on' their knowledge to others and therefore long-term employment

and internal career progression are not institutionalised. The example of training in the construction sector indicated that, despite substantial progress, many companies still did not train employees as the nature of the sector yielded an extremely high training externality (Debrah and Ofori, 2001:195). However, the strength of the Singapore approach has been its persistence. While a pervasive training culture may not yet have been established, several labour market conditions, which are conducive to investing and participating in training, are emerging. At least at the macro level, job-hopping has declined since the mid-1990s.²² While the low level of skills was one of the impediments to adopting the original model of Japanese OJT, the skill level of the workforce is no longer the same: it has substantially improved, yielding greater trainability of the workforce. After almost two decades of the productivity campaign, the importance of skills for productivity is a very important part of management thinking.

Meanwhile, the government is pressing on with more innovation and new programmes to further strengthen the skill development system. The government launched the National Skills Recognition System in 2000 to provide a national framework for establishing work performance standards, identifying job competencies and certifying skills acquisition (SPRING, 2004). It aimed to provide skill benchmarks for learners so as to guide their continuous upgrading of skills and knowledge. As of 2004, 700 occupational standards in 68 industries have been developed, and the Standards, Productivity and Innovation Board (SPRING) plans to develop 1,000 occupational standards in 75 industries by April 2005 (*ibid.*). The newly established Singapore Workforce Development Agency (2003) launched the Employability Skills System in March 2005 to equip the workforce with generic and portable skills (WDA, 2005). The list of Singapore's new initiatives in skill development is continuously being extended.

²² As a reminder, the figures are: 4% for 1990, 3.2% for 1993, 2.7% for 1997, 2.5% for 2000, and 2.2% for 2004 (MOM, 1998a, 2005b).

8.5 The state-led model revisited: the challenge of generating creative minds in the nation of the single voice

Singapore has demonstrated its strong capacity to reinvent itself to achieve continuous economic growth since its beginnings as a nation. From practically every economic crisis it faced, it grew stronger largely through state-led economic restructuring, combined with labour (and wage) restraint and skill development. It has been a major success story for the developmental state model of economic growth. The Asia crisis of 1997 was another opportunity for the government to review its economic strategy. On the one hand, the government clearly endorsed a market-oriented open economy and globalisation as the way forward for Singapore. It was followed by a number of economic liberalisation and deregulation measures including privatisation of the telecommunication sector (Low, 2001). The government also stressed the need for Singapore to achieve a knowledge-based economy and develop autonomous and creative talent to support such processes.

However, the new skill requirements have posed a difficult question. The question points to a contradiction in which innovative and autonomous talent is promoted within a tightly managed society (Gopinathan, undated; Kuruvilla, Erickson and Hwang, 2002; Low, 2001; Wee, 2001; Green 2001). The issue goes beyond the government's familiar territory of the economy to question its socio-political framework. Critics ask whether a broad innovative environment exists that would include autonomy, academic freedom, research and teaching in higher education, and freedom of expression (Kuruvilla, Erickson and Hwang, 2002:1474). Even for the much-desired autonomous risk-taking entrepreneurs, it is doubtful that Singapore has the flat, informal hierarchies and cultures that do not penalize failed attempts at creativity, as exist in places like Silicon Valley (*ibid.*). Other critics argue that a less conformist and more vibrant socio-cultural life is now needed to generate the creative citizenry that the government hopes for, while the favoured disciplinary modalities of rule are at odds with such hopes (Wee, 2001). More specifically in the area of education, Gopinathan (undated) also points out the limitation of promoting creativity at schools when the education system is still organised on the basis of rigid early

estimation (and selection) of ability and examination-centred assessment. These are main features of the skill development system that has worked well so far.

Government policy suggests that those creative and autonomous talents, which are deemed to lead the Singaporean economy to the next stage, could come from both home and abroad. The so-called foreign talents policy was given much focus around 1997 and 1998.²³ The Committee on Singapore Talent and Recruitment (STAR) was formed in 1998 to develop and implement strategies for attracting and retaining foreign talents 'to make Singapore a hub for international talents while remaining socially cohesive (Low, 2002:107). In catering to such foreign talents, Lee Kuan Yew himself acknowledged the need to offer "a social infrastructure that foreign managers will find attractive, lifestyles to which they are accustomed at home –good health care, a clean environment, concerts, symphonies, boutiques and restaurants"²⁴ (Wee, 2001:994). However, the list lacks such items such as a free society with a free press, which is considered important to attract knowledge workers (Kuruville, Erickson and Hwang, 2002:1474). In addition, the impact of such a policy on social cohesion may be underestimated. The increased number of foreigners and potentially growing income gap may result in a social cleavage whose consequence may be far-reaching for national unity.

In the early 1990s, there were some signs of a 'loosening up' of the system of tight social management. The earlier discussion on the restructuring of the wage system indicated the declining influence of the NWC in achieving unanimous consensus among tripartite actors and thus controlling wage levels. Former Prime Minister Goh Chok Tong,²⁵ who succeeded Lee Kuan Yew in 1990, promised a more open, consultative and consensual leadership style (Lim, 1994, in Lee, 2002:109). However, the old political and ideological boundaries continue to exist.

²³ For a detailed discussion of the foreign talents policy, see Low (2002).

²⁴ Speaking at the World Economic Forum in 1999.

²⁵ Goh Chok Tong resigned from the post in August, 2004 and took over the post of Senior Minister. The post of Prime Minister was filled by Lee Hsien Loong, the son of Lee Kuan Yew (Straits Times, 12 Aug. 2004).

The need to change state-society relations seems to be well-acknowledged by the government. Former Senior Minister Lee Kuan Yew²⁶ has recognised the need to abandon rules that have served Singapore for the last thirty years, while former Prime Minister Goh Chok Tong has acknowledged that a top-down approach in a globalised economy may not be best as the best business people need new challenges and provide the answers (Straits Times, 12 Nov. 1999, in Low, 2001:424). There is no doubt that the government's economic policies have been successfully based on a tight grip on political opposition and on labour discipline. Swift policy change was often supported by the absence of an open conflict of interests, as the government succeeded in inculcating among the population the notion of putting the nation first. In effect, people did not have a choice and their lack of voice was in exchange for economic prosperity and employment. The result has been political apathy and a lack of interest in politics.

citizens tend to exhibit a general unwillingness to sign up as members of interest groups or to perform volunteer social work. Indeed, much has been said about how the Singapore polity resonates with a climate of fear, which gives rise to the prevalent practice of self-censorship to the extent that many avoid or even vilify participation in activities that are held in the public sphere. After all, most Singaporeans are well aware of their 'rightful' place in a society that demands utility via docility (Lee, 2002:103).

In this light, citizens' commitment and ownership of Singapore's future is often seen as doubtful, not least by the government. In this regard, it is understandable that the government is concerned and feels the need to cultivate a sense of nationhood among the population through a national vision and strategy expressed in *Singapore 21: Together We Make The Difference* (1999) (Koh and Ooi, 2000; Lee, 2002). However, according to a public opinion survey commissioned by the authorities, one in four respondents expressed scepticism (and cynicism) toward the vision statement, dismissing it as government propaganda or a political ploy (Lee, 2002:107). While the economic pragmatism of Singaporeans may continue to provide the basis for their

²⁶ In light of Goh Chok Tong's taking of the post of Senior Minister, following his resignation as Prime Minister, Senior Minister Lee Kuan Yew became Minister Mentor, a more advisory role.

support of the political leadership, the tight grip on society seems deeply rooted and underlies state-society relations.

The ironic fact is that the state-led model with its tight political control was the very basis for economic prosperity. While this model may be at odds with the new economic challenges and skill needs, the government resists moving away from it because economic failure would be a threat to the legitimacy of the government and to social cohesion. Low (2001:436) reminds us how important it is for Singapore to maintain political stability by stating that “if security and political stability is called into question, even economic efficiency, productivity and competitiveness may fall prey to shortcuts and the ultimate demise of Singapore Inc.”. Lee (2002) expects that the political framework created by the government is likely to continue, or even be extended, but with greater fineness and subtlety, as the government would feel more need to ‘manage’ society with the anticipation of an emerging well-informed, well-educated and affluent younger generation (ibid.:112). Despite its continuous political commitment, reinventing its political formula and philosophy has not been as forthcoming as economic restructuring (Low, 2001:435). The problem is that the formula is unknown and untested, and the government is not willing to venture into such an experiment given the high political risks.

Despite the economic prosperity it has achieved, the main framework of political legitimacy –economic prosperity and nation-building– still holds and guides the political scene and behaviour of the government. In relation to the evolution of the skill development system, the existing framework is likely to continue governing the relations among the tripartite actors and the broader population. Without a substantial change in the relationship among the stakeholders, it is unlikely that a major change will occur in the workings of the labour market and the pattern of the state-led skill development system in the short-run.

Conclusion

Singapore’s skill development system is often held up as a success story for aspiring developing countries to learn from. The general importance of investing in education

and training for economic development is well-accepted, and the expectation on governments to take a leadership role is high. However, Singapore's experience demonstrates that the construction of a skill system that is highly responsive to the needs of the economy requires years of persistent effort, supported by the government's strong capacity and legitimacy to build such a finely-tuned system. The chapter highlighted, however, that the crucial factor in developing such a system was the political settlement, or the state-led consensual tripartism, whose basic structure was largely established by the late 1970s. While the government has succeeded in bringing economic prosperity to the country, the effect of the social pact –employment and growth in return for tight control on social forces including labour discipline– remains intact and continues to legitimize this existing political framework. The evolution of the state-led skill development system is rooted in the historical pact of the state, employers and workers and continues to be valid.

Chapter 9 Conclusion

The study has attempted to account for the evolution of skill development systems through the lens of tripartite relations. The study is based on the perspective that a skill development system consists not only of education and training organisations but also of employment practises, the wage structure and the articulation of education qualifications in the labour market which, together, form a broad incentive mechanism for individuals and firms to train. Individuals and firms, responding to formal and informal rules and incentives, create a generalised pattern of training provision and participation, which provides the distinctive character of each skill development system. The study has demonstrated that the relations and interactions between the state, business and labour are a major influence in articulating and shaping these practices, which are referred to in this study as *institutions*.

A skill development system is essentially a historical product, reflecting the evolution of power relations, contested interests and economic and social changes in the country. While the skill development system is often influenced by changing skill demands stemming from economic, political and technological challenges, it is also shaped by how the stakeholders respond to these challenges by creating or changing the institutions that comprise the system. The responses to such challenges are shaped by negotiations, compromises and agreements between the actors who support different interests and work within a specific set of power relations and circumstances.

The analysis of the evolution of the skill development systems in Japan and Singapore has demonstrated the influence of such historical processes. Japan's internally oriented or company-based system contrasts with Singapore's externally oriented system. Each system is the product of a set of historical events and social dialogue that has shaped tripartite relations and, in turn, influenced the shaping of the skill development system. In particular, in Japan companies and unions played a

stronger role in shaping the system while in Singapore the state proved to be a more powerful actor. Tripartite relations have influenced not only the world of work, but also relations between government, teachers' unions, parents and business that have shaped the nature of the education system which in turn has affected labour market outcomes and the nature of training (internal to the enterprise or external). Differences regarding the role of the state, as well as tripartite relations and social dialogue, are not sufficiently reflected in the dominant theoretical perspective used in analyzing skill development systems in East Asia. Instead, Japan and Singapore show considerable differences as to the extent of the state's role. The study acknowledges the usefulness of the developmental state perspective, in particular in analysing the formulation of the skill development system in Singapore. However, the examination of skill development systems through the lens of tripartite interactions revealed the influence played by non-state forces –in particular in the case of Japan but to some extent also in Singapore– which have not been sufficiently accounted for previously. The differences in the skill development systems of the two countries reflected the accumulation of different sets of historical conflicts, compromises and agreements between the stakeholders.

The study presented a new framework consisting of five key factors that guide tripartite relations and the responses to the on-going challenges of skill development. Those factors are: major historical disjuncture; periodic economic and social challenges; internal dynamics of each actor; formal structures for negotiations and path dependence. Using this framework, the following section summarises the findings of the *comparative-historical analysis* of skill development systems in post-war Japan and post-independence Singapore. This is followed by an assessment of the main *theoretical* contributions of the institutional and negotiated compromise approaches. The final section then discusses the contribution and limitations of the study's five-part *conceptual* framework.

9.1 Comparative-historical analysis of the two cases

Major historical disjuncture

Major economic, social and political events which mark a disjuncture in a country's history can have considerable influence on the existing power relations. Imminent, urgent or crisis situations that such a disjuncture creates can set a common agenda for a society. Such a disjuncture can arise from exogenous forces or can result from the particular dynamics of the political economy. The key historical disjunctions for this study were: Japan's defeat in war and the major social and economic restructuring under the occupation of 1945-51; and Singapore's unexpected separation from the Malay Federation in 1965 and the need to become a sovereign nation. In both countries, the events led the population to endorse the initiatives for rapid industrialisation and economic growth, which became the common higher objectives for society.

The effects of these two historical disjunctures were different, however. While the disjuncture led in Japan to the unprecedented rise of unionism and other progressive forces in the early decades of the post-war period, the disjuncture in Singapore provided the fundamental condition which promoted the rise of a government that took a leadership role in social and economic development. In Japan, while the state and big business regained their power after the occupation, labour continued, at least until the 1970s, to exert considerable influence on matters related to employment and work. In contrast, in Singapore the crisis situation caused by sudden independence led to the rise of the state and legitimised its actions to overcome the crisis. This included the enactment of pro-employer labour legislation and the reorientation of labour (to support national goals) which together were deemed necessary to create peaceful industrial relations to support the MNC-based economic growth strategy. An implicit agreement emerged at the time between the state and labour (or broader society) that the state leadership would be supported and legitimised by the populace in return for its ability to provide employment and economic prosperity. Thus, a major historical disjuncture

can give rise to one actor becoming stronger, but it can also limit the role of a particular actor.

As for their skill development systems, the long-term employment practice in Japan, which evolved on the basis of the influence of the labour, laid a foundation for the evolution of a company-centred skill development system. In Singapore, while the re-orientation of labour succeeded in virtually eliminating industrial unrest, pro-employer employment legislation, combined with measures to severely weaken confrontational labour organisations, made employment insecure for many workers and facilitated high labour turnover as workers sought better opportunities. While labour shortages also contributed to such high job mobility, high labour turnover made it difficult for employers to commit themselves to employee training.

The differences in power relations created by each historical disjuncture also influenced the evolution of formal education systems. The formal education system in Japan was influenced by the rise of progressive forces (notably the teachers' union, called Nikkyoso) in the early post-war period and was transformed into an egalitarian, non-differentiated system. The system was also shielded from being directly linked to industry's skills needs, not least in the sense of manpower planning. Conversely, in Singapore, despite initial opposition from the Chinese community, English-focused education was pursued, as it was seen by the government as crucial for Singapore's competitiveness. The introduction of streaming in the education system in 1979 was also controversial, but the primacy of economic growth and competitiveness led the government to argue that it needed to improve efficiency in education. The link between the supply of and demand for skills was vital for the resource-deficient nation and thus manpower planning has played, and still plays, an important role in ensuring that link. As a result, while school-based pre-employment vocational education plays a secondary role in Japan, in Singapore the improved responsiveness of the formal system to the needs of the economy increased the importance of formal, pre-employment education and training in the overall skill development system.

While an historical disjuncture can set the basic framework of power relations, such relations are not fixed, although such a framework can establish an important legacy or a path for the future. The continuity of such a framework depends on the

extent to which the conditions that created the original power relations continue to exist. The relations and framework can also alter as the stakeholders attempt to overcome ongoing economic and social challenges.

Periodic economic and social challenges

While the scale of impact may not be as large as a major historical disjuncture, a number of periodic economic, political and social challenges can also affect and require adjustments to existing institutions. These challenges can influence relations between the stakeholders as the special circumstances created by such periodic challenges can limit the options that each actor is able to pursue. These challenges include: economic recession; intensified economic competition; demand for higher productivity; advancement of technology; changes in national economic strategy; or the rise of particular social demands (e.g. equal opportunity in education). The study has demonstrated that while the skill development system is often influenced by changing skill demands stemming from periodic challenges, it is also influenced by how the stakeholders respond to these challenges by forming or changing the institutions that are part of the broader skill development system.

For example, automation and the introduction of technology in the workplace in Japan beginning in the 1960s did increase skills demands. However, enterprises opted to commit to long-term employment practices and any excess labour resulting from automation and mechanisation was dealt with primarily by transferring workers to new jobs within a factory or relocating them to other factories or associated companies. The experience indicates that the agreement on long-term employment continued to guide the choice and actions of tripartite actors. In Singapore, the economic recession in the mid-1980s led the tripartite actors (through the NWC) to agree on wage restraint for two years and to make the wage structure more flexible as the existing seniority-based structure resulted in wage increases greater than the rise in productivity. Contrary to Japan, the framework of state-led tripartism, largely established by the end of the 1970s, allowed for the implementation of nation-wide wage restraint and the swift shift to a flexible wage structure that would not have been possible in a different tripartite context.

Responses to specific economic and social challenges that alter existing institutions do not necessarily anticipate the resulting changes in the skill development system. However, the modified institutions also generate change in the overall incentive structure for individuals and firms to train. The analysis of Japan, for instance, highlighted that the formation of the enterprise-centred skill development system was not the result of intentional action at the beginning. However, as most employers responded to new skill demands by developing the skills of their existing workers, this created the basis for the subsequent development of the company-centred skill development system. Once the benefits of long-term employment for skill development were acknowledged, however, the further advancement of technology encouraged employers to take a more intentional and systematic approach to skill development. In contrast, in Singapore the tripartite actors agreed that the shift to a flexible wage structure was necessary, but the move further reduced the incentive for workers' long-service and counteracted the government's effort to reduce high labour turnover (which had been seen as a major bottleneck inhibiting firms to invest in training). The importance of the workforce's skills in the overall economic strategy meant that the government played an active role in skill development. However, the reluctance of employers to invest in training gave the government another reason to intervene heavily in skill development initiatives.

The above examples indicate that the evolution of the skill development system is not always intentional or predetermined. The above examples in fact highlight that skill development systems evolve after the establishment of certain institutions. The example of Singapore indicates that even with a proactive state, it was difficult to entice employers to commit to training when the labour market, characterised by high labour turnover, provided a disincentive for them to invest (although the situation has improved since the 1990s). Thus, the particular evolution of institutions, or in this case of broader incentive mechanisms, can also influence the course of skill development initiatives by the government or other actors.

Internal dynamics of each actor

The responses of each actor to periodic challenges are influenced not only by the relations and interactions between the actors but also by the internal dynamics of each actor. Such dynamics (for this study, in particular within labour) can also limit the scope of action. Internal dynamics within labour unions can be affected, for instance, by: a threat to the existing structure of labour representation; the break-up of unions or loss of leaders; and declining membership.

In terms of the unions, a threat to their very existence is one of the factors that may weaken their negotiating power. Such a basis can include: a threat of collapse of the company where a union exists (in the case of house unions); and the relative strength/weakness of the industry which the union represents (in the case of industry-based unions). The experience of Japan highlights the limitation of enterprise-based unions in pushing the interests of workers when their companies are threatened with collapse. Such a dilemma was demonstrated in the labour-management pre-consultations about the treatment of excess labour, in which severe business conditions sometimes drove house unions to agree to difficult concessions. The break-up of unions or the loss of leaders (either by coercion or due to internal conflict) can also have a detrimental impact on their strength. Political purges of the leaders of opposition or militant union movements, the change of union leadership and the break-up of large unions all took place as part of the reorientation of labour in Singapore to transform labour into an active collaborator in achieving pro-national, government objectives.

A declining membership is also an important factor which affects the negotiating power of the unions in general. Labour unions in Japan had been struggling to be relevant to the needs of their members and to provide effective opposition. The struggle led to a split of the unions due to factionalism which was finally resolved through the amalgamation of the moderate wings of both public and private unions in 1989 to form the largest union confederation (*Rengo*). However, due to the collaborative stance that the union adopted, the union's influence in regulating employers' action has been questioned. Its limited intervention in setting required skills standards, designing assessment procedures and making skills/personnel appraisals

transparent has been criticised. In contrast, while the reorientation of traditional labour initially led to a decline of membership, the NTUC has regained the support of labour since then. The introduction of cooperative activities and an increase in the benefits for members contributed to reversing the trend. The interesting/ironic contrast between unions in Japan and Singapore is that while Japanese unions have arguably reduced their influence over time, the NTUC unions in Singapore have grown to be an influential force in particular in terms of skill development, albeit within a state-led framework.

Formal structures for negotiations

The study also demonstrated that the formal structure for negotiations can have considerable influence on the interactions of tripartite actors. The notable example was the National Wage Council in Singapore. The study showed that wage policy was decided on the basis of tripartite agreements at the NWC. While this formal organisational structure provided an official platform for organised labour to negotiate and express its interests, at the same time this restricted the representation of labour. While an equal number of representatives from the government, employers and unions constituted the NWC, the representatives had then to be approved by the Ministry of Labour. While the Council provided an official forum for the negotiation of contested interests, the outcomes of such negotiations reflected the framework of power relations at the time. The formal structure also included the legal framework regulating industrial relations and the example of the Employment Act (1968) indicated that this legal framework restricted the scope of union action.

Path dependence

Differences in skill development systems reflect an *accumulation* of historical compromises and agreements between the tripartite actors. They reflect an *accumulation* because institutions that have evolved as a result of tripartite interactions can have a lasting impact and guide the course of subsequent institutional development. Agreements and settlements that have been achieved after prolonged and bitter conflict and negotiation tend to provide such a lasting framework. The Japanese examples in

this regard include long-term employment practices and the principle of egalitarian education. In Singapore, the framework of state-led tripartism (underpinned by the implicit social contract between the state and society), the close coordination between education and work and the externally-oriented labour market are the lasting features of the skill development system. Changes in institutions, in particular in employment and wage practices, often took place as responses to immediate economic or technological concerns. However, the analysis showed that many changes were incremental, or took place within the existing power relations, as the previous practices and relations provided the basic parameters for what and how much could be changed and by whom. These changes took place within the framework of past developments.

The historical analysis also highlighted, however, that the continuous economic challenges forced original agreements on long-term employment in Japan to be modified and this sometimes led to unintended consequences. The economic challenges led employers to reduce personnel costs without compromising the quality and quantity of work, and this facilitated, over time, very tight personnel management practices, accompanied by changes in wage structures and personnel appraisal systems. This created a system which facilitated workers' willingness to learn, utilise their skills and, in general, work hard. While long-term employment practices became a social norm, the majority of workers chose to respond to their companies' demands, willingly or unwillingly.

Relationship between factors: the issue of change and continuity

The effect of path dependence does not prevent drastic change in the system and its institutions, nor does it mean that institutional change will be pre-determined. The study indicated that drastic change is still possible as a result of fundamental change in the relationship between stakeholders, either as a result of a major historical disjuncture or more gradual and long-term social change. The analysis of Japan has shown that many of the core elements of the existing institutions continue to characterise the skill development system. On the other hand, it detected a number of undercurrents suggesting the possibility of greater change in the future. Such undercurrents include changing social values toward work and the demise of the former structure of contested

interests. The dominant labour unions currently take a collaborative stance and the polarised relations between the Ministry of Education and Nikkyoso was also ended by the close of the 1980s. Together with changing social values, the changes have meant that existing institutions have lost their supporting interest groups.

In contrast, substantial change is unlikely in the near future in Singapore. As indicated in the section on historical disjuncture, the continuity of a framework depends on the extent to which the imminent conditions that created the original power relations in the first place continue to exist. In Singapore, the basic rationale for continued state leadership and the social pact between the state and society have not been altered. The common higher objectives that the historical disjuncture created remain as recurrent issues. However, despite this, the existing relations and framework are not shielded from ongoing economic and social challenges, which continue to push existing boundaries. For instance, the latest economic challenge that led the government to promote autonomous and creative talents has prompted the question of whether the current framework of power relations (and tight management of society) can harness such creative energy. As new economic challenges demand businesses and individuals to take their own initiative, the increasingly affluent and educated population may question the existing framework. This, however, remains to be seen.

9.2 Contribution of the theoretical framework: institutionalism and negotiated compromise

The study adopted an institutional approach to the formation of skill development systems, and a negotiated interest/compromise approach to their evolution. It is important now to revisit the study in a more theoretical light, asking how these approaches help to deepen our theoretical understanding of skill systems.

First, to understand how individuals and firms train, the institutional perspective was useful in demonstrating the working of individual agency (rational choice), while at the same time showing that such agency was exercised within the boundaries of the institutional context. Theoretically, the institutional approach allowed the study to bring together elements of human capital theory with the culturalist perspective, which

were considered in this study as exemplars of approaches which stress 'agency' and 'structure', respectively. While human capital theory was criticised for failing to account for the social embeddedness, or context, of individual and firm behaviour, the institutional approach helped to demonstrate the workings of a set of institutions in shaping the system. By doing so, the approach also allowed the study to discuss more specifically what 'social context' means in terms of the key institutions which make up the broader skill development system. While the study criticised the culturalist perspective for its over-emphasis on the collective nature of behaviour, the institutional perspective allowed the study to appreciate the importance of 'structures' by demonstrating that behaviour is conditioned by institutions.

Taking institutions as an analytical unit, the approach also allowed the study to illustrate the link between a set of institutions and the overall skill development system; in other words, how key institutions have come to form and affect the overall shaping of the system. The examination of the evolution of each institution was useful in illustrating how different interests interacted over a specific issue. This was particularly effective in highlighting the influence of non-state actors.

The weakness of the institutional perspective, however, lies in its limited focus on the origins and evolution of institutions. The study sought to overcome this weakness and in doing so highlighted the conflictual and negotiated compromise aspects of institutions. These issues have not been fully explored previously in the context of East Asia skill formation and allowed for a more complex picture of system evolution to emerge.

The limitations of the conflictual or negotiated-compromise approach need to be acknowledged, however. The main issue here is that the degree of 'conflict' (versus more peaceful negotiation) is not distributed evenly between countries or across time within a country. The conflictual nature of relations between stakeholders is well-demonstrated in the case of Japan in the 1940s-60s (and up to the late 1980s in the education sector). In Singapore, however, (overt) conflict was less pronounced and it was concentrated in the first 15 years after independence. In that country, 'conflict' took a more subtle form, in which different societal interests united to support the national agenda through state mediation (including occasional coercion). In Japan, the

declining influence of labour also changed the negotiating power of the stakeholders and reduced the degree of conflict compared to the 1950s-60s. In fact, it is difficult to characterise the situation in Japan in the 1950s and in the 1990s with the same notion of 'conflict'. In this respect, it may be better not to speak of 'conflict' but of 'negotiation' and its outcome ('negotiated compromise') which better capture the broader undercurrents of the longer-term development of systems across time and space.

In addition, while the study focuses on state, business and labour as the main interest groups involved in shaping employment and skill development, diverging interests among workers and young people in Japan since the early 1990s highlight the limitations of the tripartite framework in conceptualising societal interests. This suggests the need for improvements in the framework.

The study also highlighted two theoretical issues that are relevant in discussing competing explanations of how skills systems develop. First, the study noted the differing influence of the advancement of technology and/or companies' competitive strategies on the skills system. Japan's rapid ascend up the technological ladder certainly increased the demand for skills by employers and provided a strong rationale for them to invest in skill development. However, the study demonstrated that the social agreement on employment security played a role in encouraging employers to train and retrain existing workers, instead of prompting them to simply recruit workers externally with new and higher skills. In Singapore, technology and global competition have, compared to Japan, had a more direct impact. The government's strategy to shift the economic base from that of a low-value added, labour-intensive and largely low-skilled economy to that of a high-value added and high-skilled one in the late 1970s certainly raised the level of technology and skills required. However, the study has argued that it was the government's strategy –and more importantly the power and interest structure which allowed the government to pursue such a strategy– rather than the advancement of technology and global competition *per se* that had greater impact on the system. In other words, the influence of technology and global competition has been mediated by domestic interests and the existing power structure.

Secondly, the impact of multinational companies remains inconclusive at this stage. The close link between the state's national competitive strategy and the presence

and operations of MNCs in Singapore makes it difficult to assess the impact of these companies on the skill development system. The experience shows that MNCs in Singapore did and do provide training when facilitated by the government. The adoption of an MNC-based strategy that focused on rapid job creation and economic development initially required the government to take the initiative in skill development in an effort to attract those foreign companies. However, given the MNCs' deep penetration into the domestic economy, the nationality of firms may not have been the determinant factor in shaping the skill system. At the very least, the limited number of cases in the current study makes it impossible to provide a conclusive answer concerning the impact of the nationality of companies on skills and awaits further study with a larger number of cases.

9.3 Contribution and limitations of the five-part (conceptual) framework

The concepts of institutionalism and negotiated compromise have provided the overarching theoretical perspectives for the study. To undertake the empirical analysis, a five-part framework was developed to guide the overall analysis of the two cases. The following section reflects on the contribution and limitations of the framework in taking forward the analysis of skill development systems.

First, the framework allows for an investigation of the historical evolution of skill development systems through the lens of internal stakeholders and their power relations. The broad framework also allowed the study to integrate the influence of multiple factors, such as technology, competitive strategy and economic pressures through history, while making an argument that the impact of these factors was mediated through the existing power and interest structure. In other words, the framework made it possible to highlight a perspective that had not been fully appreciated in the past, without disregarding the other explanations developed to understand skill systems. Brown, Green and Lauder (2001:53) argued that "the study of skill formation must always include an analysis of the historical, institutional, cultural, political and economic context". The application of the framework helped to demonstrate more concretely the workings of such multiple factors in the two

countries. By doing so, the study has provided a perspective in which the development of the system is not the direct effect of one or two dominant economic, historical or political factors, but rather a historical construct of the interests, interactions and underlying power relations among the stakeholders.

Secondly, the framework allowed the study to examine the historical evolution of the systems. It included not only the impact of major historical disjunctures (events) but also periodic economic and social pressures and crises. It also integrated the continuing effect of critical choices and compromises made in the past (*path dependency*). While some studies have addressed the *rise* of the system (Green, 1990, 1999; Ashton and Green, 1996), the framework helped the study to demonstrate how the system *evolved* through the interactions between historical factors and the stakeholders' interests and power relations.

Thirdly, the framework was useful in providing a more pluralist account of the evolution of skill systems in East Asia. The examinations of the 'internal dynamics of each actor' (factor 3) and the 'formal structures for negotiation' (factor 4) allows us to appreciate more deeply the perspective of each actor and the context in which each stakeholder shaped its interests and the course of their actions. As stated previously, bringing a pluralist perspective to East Asian skill formation complements the current state-focused approach by placing more importance on the role of non-state actors. The study showed that the role and influence of the state is relative and determined by the changing power relations and interests of other stakeholders, which are unique to each country. As we witness since the 1990s the declining influence of the state (and the rise of non-state forces) in other countries in the region (e.g. South Korea), a greater appreciation of non-state interests is key to understanding the future evolution of skill systems in the region.

The limitations of the framework need to be acknowledged, however. While the framework helps us to understand the intricate context in which institutions and systems have evolved, its capacity to predict the future course of a system's development is limited. The framework suggests the importance of knowing and addressing stakeholders' interests and their political context in changing or building a system. However, the framework is more a conceptual tool for understanding the

evolution of systems and is not a set of benchmarks that can indicate to stakeholders how they can fix or improve an existing system.

An appreciation of the historical integrity of each case also does not allow the framework to specify, in a more generic way, how each of the factors affects each other or the degree of impact that each of the five factors has on the others. The two cases included in the study indicated that a major historical disjuncture can have a significant impact on power relations. However, the framework cannot predict *how* a major historical disjuncture will impact on power relations. It does not provide answers as to why such a disjuncture allowed Singapore to have such capable government, nor why Japanese employers opted to adhere to the social agreement on employment security to such an extent. A similar major historical disjuncture in another country can produce a different outcome. Thus, the appreciation of each national case prevented the study from generating a general theory in terms of the evolution of skill systems. The framework is also limited in providing answers to questions such as when or how the path dependency will break, and how 'major' an historical disjuncture needs to be to break the path. To address these questions, an application of the framework to other countries is needed.

The study's attempt to better appreciate the perspective, interests and interactions of each stakeholder might have, on the other hand, underplayed the importance of broader emotional-collective interests which bind stakeholders. These include nationalist sentiment (in reviving a once-proud nation and spurring it to catch up to a former occupier nation) or a sense of national threat, coupled with middle-class aspirations (e.g. improved standard of living and better education). Consensus on these broader societal interests between the state, business and labour perhaps can have considerable impact on national unity and on concerted actions for the national cause (i.e. building companies and a national economy as long as there are visible gains in individual living standards). The study weaved these elements into the respective empirical chapters. However, by not including them as a part of the five-part framework, they may not have received sufficient attention. Factors such as national sentiment, cohesion and middle-class aspiration themselves cannot tell us much about the shaping of the particular type of skill development system, which has been the

objective of the present study. However, it needs to be acknowledged that they could significantly influence the outcomes of the contestations, negotiations and compromises of different social interests.

In this regard, this study of two countries indicated how a major change in social interests facilitated fundamental change to existing institutions and the broader system. National unity has been increasingly a thing of the past in Japan as the national sentiment withered away and middle-class aspirations declined as many people achieved their goals and/or as new aspirations emerged. As noted, systems that are not anchored by strong interests are open to alternatives and thus bound to change. In this sense, a fundamental change in interests has not yet been observed in Singapore. While the limitation of the old logic of putting the national interest first as a means of social control is visible, the legitimacy of the state remains in tact and the weak institutional basis, including the MNCs-centred business sector, to challenge the state are, however, likely to slow the pace of change.

In terms of the evolution of institutions and systems, the study has indicated that a system is likely to change fundamentally when it is no longer perceived to be functioning adequately *and* when that is accompanied by a major shift in the interests and power structure that have supported the existence of the system. The study demonstrated this point in the cases of two countries. The application of the theoretical and conceptual frameworks used in this study to other East Asian countries would further deepen our understanding of the evolution of the skill development systems.

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